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THE ECONOMICS OF CLEAN WATER. VOLUME II. DATA AND TECHNICAL APPENDICES

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THE ECONOMICS OF CLEAN WATER

VOLUME II

DATA AND TECHNICAL APPENDICES

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GENERAL INTRODUCTION

This volume was prepared to provide information and detail for the analyses presented in Volume I. EPA hopes that further studies will be conducted by many persons engaged in the water resources and waste management areas and that the material provided here is a part of their analytical base.

The Appendix is in four parts. Part I contains the general discussion of the Industrial Facilities Evaluation Model which was developed to provide the industrial costs for wastewater treatment. In part II, there is presented the detailed output from the industrial model along with some of the basic water use/employee information developed for the model. Part III contains the logic and method of the pollution index along with the summary results by second order watersheds and EPA administrative regions. Last, in Part IV, the procedure and questionnaire used in the 1971 assessment of planned construction of municipal waste treatment facilities.

PART I

INDUSTRIAL FACILITIES EVALUATION MODEL

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INTRODUCTION

The question to be answered is:

> What is the cost of wastewater treatment to U.S. industry assuming that industry must reach the equivalent of secondary wastewater treatment as stated in the Water Pollution Control Act.

A further refinement of the question is:

> Give me the answer to the above question broken down by significant industrial types.

This question was asked to provide a basic input into determining the economic impact of pollution control on U.S. industry. Both air and water pollution control costs were considered in the overall analysis of economic impact. The analysis to be discussed here only considers the factors relating to industrial wastewater pollution control.

The group responsible for carrying out this study was employed by the Environmental Protection Agency in the Water Quality Office, Division of Planning and Interagency Programs, Systems Analysis and Economic Studies Branch.

The approach taken to answer the question posed was, as the title indicates, to develop and use an economic cost model of U.S. industry which we feel represents the high cost abatement measures U.S. industry could take and the costs associated with these actions.

The cost model is in a sense a misnomer in that the cost analysis consisted of many models and separates analyses used as input to a final stage of the analysis the costing out of industrial wastewater pollution control measures and then presenting this information in most enlightening and complete form we felt was appropriate.

In any analysis of this type the analytical form is quite significantly shaped by the data available. Were this analysis postponed for a year or more, it is possible that more detailed data on U.S. industrial waste discharge may have been available, but the luxury of time was not ours. The most basic data elements available were: The Dun and Bradstreet file of Industrial Manufacturers in the United States whose basic components of value to us were the location of the manufacturing plant (State, county), the type of primary business engaged in (Standard Industrial Classification Code--[SIC]), and the number of manufacturing employees at the plant; 1967 and 1963 Census of Manufactures--Water Use in Manufacturing from which we were able to obtain an estimate of regionally distributed water use per manufacturing employee by SIC code, current industrial wastewater treatment practice, and approximately how many plants engaged in manufacturing we should be considering in our analysis;

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and wastewater unit treatment process cost functions relating wastewater flow to capital cost and operating and maintenance costs.

With these three basic elements and many other important analyses and research we feel we have brought these pieces together to form a reasonable answer to: what is the cost of wastewater treatment to U.S. industry assuming that industry must reach the equivalent of secondary wastewater treatment as stated in the Water Pollution Control Act?

MODELS DEVELOPED

Figures A through C show the basic steps involved in this cost analysis. The following items explain the numbers which are indicated in each figure.

EXPLANATION OF NUMBERED AREAS IN FIGURES A THROUGH C

(1) Basic Data File: Specific industries listing

industry type
location
employment

(2) Basic Data File: Industry type, location water use, employment

industry type
water use per employee
locationally defined

(3) Literature Search and Experience

industry type
unit treatment processes used
percent of total flows expected to pass through each unit process

(4) Literature Search and Experience

industry type
number of working days per year

(5) Literature Search and Experience

industry type
waste strength (non-dimensional) relative to municipal

(6) Literature Search and Experience

unit treatment process
capital & O&M cost as a function of waste flow

(7) Literature Search and Experience

industry type
capital cost factors regionally defined
operation & maintenance cost factors regionally defined

(8) Literature Search and Experience

construction cost factor for contingencies associated with construction

(9) Basic Data and Manual Summary

number of plants in an industry group using various waste treatment processes

(10) Basic Data and Manual Summary

flow in each treatment by all plants in an industry using that process

FIGURE A

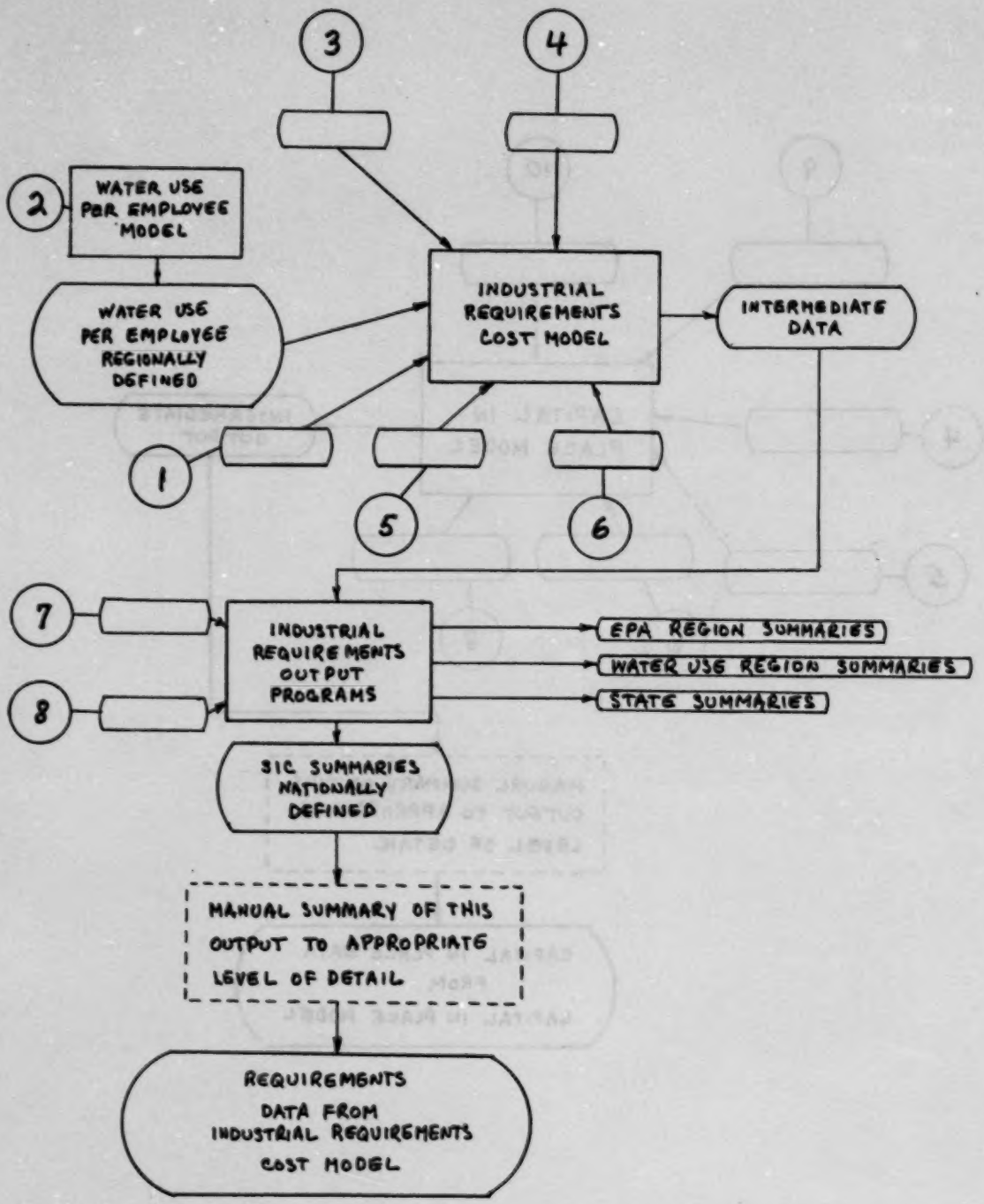

3
4
2
WATER USE PER EMPLOYEE MODEL
WATER USE PER EMPLOYEE REGIONALLY DEFINED
INDUSTRIAL REQUIREMENTS COST MODEL
INTERMEDIATE DATA
1
5
6
7
8
INDUSTRIAL REQUIREMENTS OUTPUT PROGRAMS
EPA REGION SUMMARIES
WATER USE REGION SUMMARIES
STATE SUMMARIES
SIC SUMMARIES NATIONALLY DEFINED
MANUAL SUMMARY OF THIS OUTPUT TO APPROPRIATE LEVEL OF DETAIL
REQUIREMENTS DATA FROM INDUSTRIAL REQUIREMENTS COST MODEL

FIGURE B

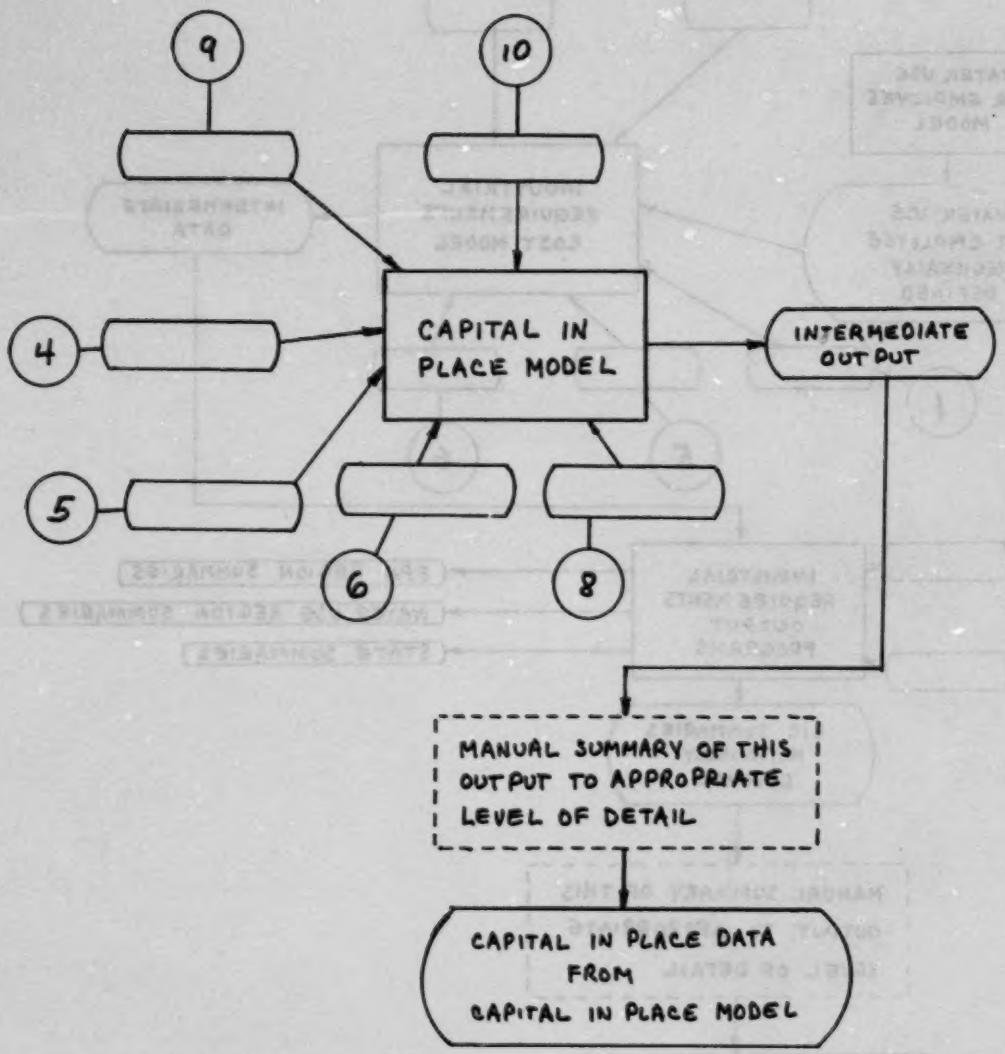
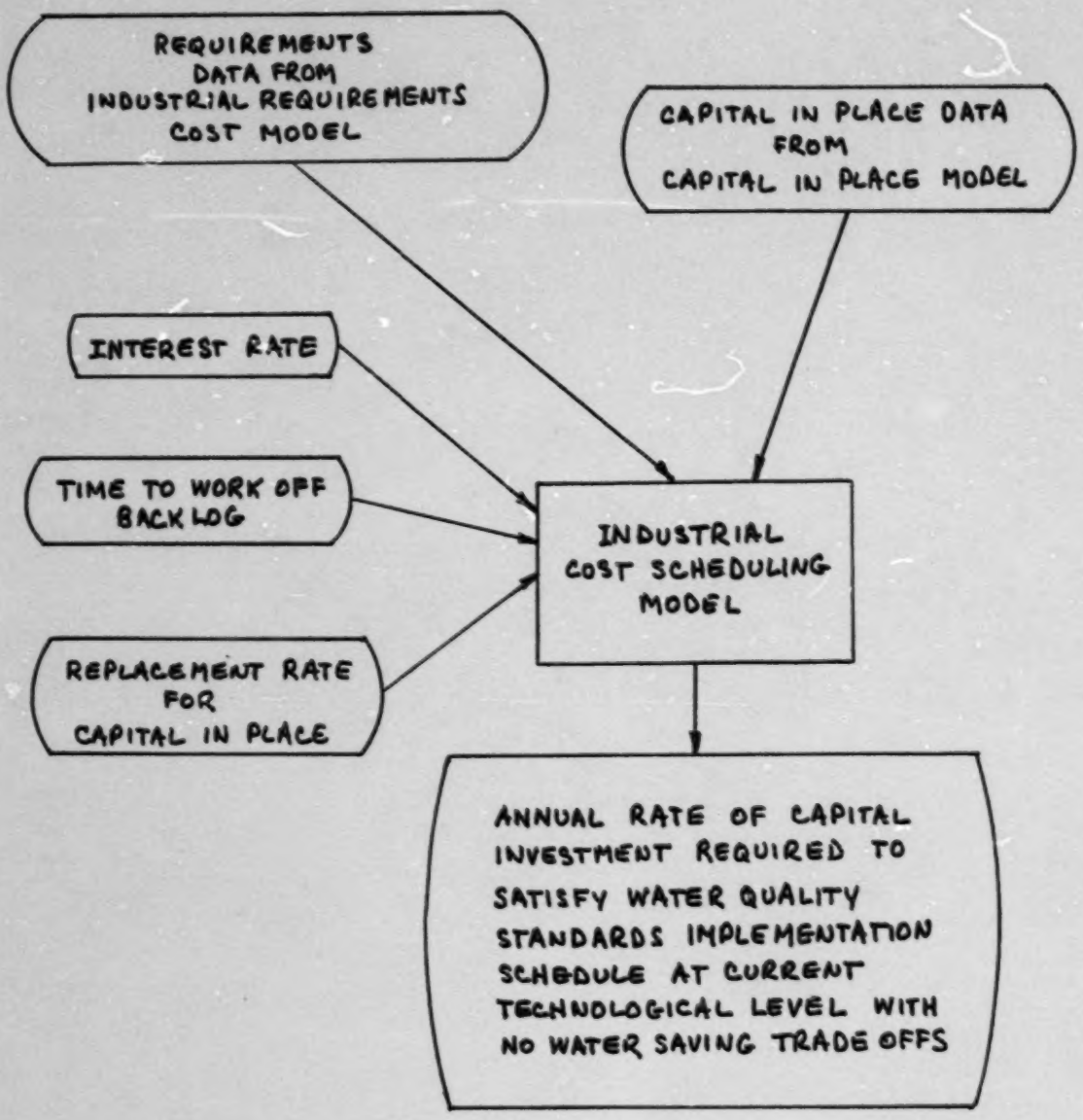

9
10
4
CAPITAL IN PLACE MODEL
INTERMEDIATE OUTPUT
5
6
8
MANUAL SUMMARY OF THIS OUTPUT TO APPROPRIATE LEVEL OF DETAIL
CAPITAL IN PLACE DATA FROM CAPITAL IN PLACE MODEL

FIGURE C


REQUIREMENTS DATA FROM INDUSTRIAL REQUIREMENTS COST MODEL
CAPITAL IN PLACE DATA FROM CAPITAL IN PLACE MODEL
INTEREST RATE
TIME TO WORK OFF BACKLOG
REPLACEMENT RATE FOR CAPITAL IN PLACE
INDUSTRIAL COST SCHEDULING MODEL
ANNUAL RATE OF CAPITAL INVESTMENT REQUIRED TO SATISFY WATER QUALITY STANDARDS IMPLEMENTATION SCHEDULE AT CURRENT TECHNOLOGICAL LEVEL WITH NO WATER SAVING TRADE OFFS

DISCUSSION OF WATER USE PER EMPLOYEE MODEL

Overview

A central component of the industrial cost model to define required treatment by industry was a mechanism to relate industrial activity as measured by industry types, employment sizes, and locations of industries to waste generated by these industries. Waste generation was measured in terms of quantity (flow) by an analysis of the 1967 Census of Manufactures, Water Use in Manufacturing to determine water use per manufacturing employee discriminated by type of industry (4-digit SIC Code) and location (Water Use Region--elsewhere defined).

Table 2 from the 1967 Census of Manufactures, Water Use in Manufacturing provided the following detail required for the analysis.

Data--Table 2--Water intake by purpose, Gross Water Used, and Water Discharged: 1968
A--Industry Group and Industries
- employees
- water intake
- process water intake
- gross water used
- total water discharged

Data--Table 2--Water intake by purpose, Gross Water Used, and Water Discharged: 1968
B--Water Use Regions, Major Industry Groups, and Industries
- employees
- water intake
- process water intake
- gross water used
- total water discharged

Mathematical Formulation

The model defining water use per manufacturing employee basically forms ratios of regional to national totals to define variability between major classes of manufacturers geographically and also looks at the variability between industrial classes within a major manufacturing class. The water use per employee values define the process water per employee coming into contact with the product stream; the final equation is defined as follows:

$$WT4R_{(e)} = \frac{WP4}{E4} \times WP2R' \times WU2R' \times \frac{WU4}{WI4}$$

Where the process water to be treated is constrained to be no greater than the total amount of water discharged.

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The parameters are defined as follows:

E -- employment
WI -- water intake
WP -- water intake specifically used in product processing
WD -- water discharged
WU -- water used (gross used in plant including recirculation and reuse)
WT -- TOTAL WATER IN CONTACT WITH PRODUCT STREAM

Further discriminators for designating the parameters

4 -- four-digit SIC Code
2 -- two-digit SIC Code
R -- water use region designator--(if no R exists the parameter is assumed to be a national value)
(e) -- designates a per employee value
primes -- represents ratios calculated between regional and national values

Incrementally, the model was built using the following logic:

(a) process water per employee ratio; regional defined ratio at the major industrial class level

$$WP2R' = \frac{WP2R \;/\; E2R}{WP2 \;/\; E2}$$

(b) recirculation ratio; regionally defined ratio at the major industrial class level

$$WU2R' = \frac{WU2R \;/\; WI2R}{WU2 \;/\; WI2}$$

(c) water discharged per employee: represents the maximum water to be treated per employee for each industrial category, regionally defined

$$WD4R_{(e)} = \frac{WD4}{E4} \times \frac{WD2R \;/\; E2R}{WD2 \;/\; E2}$$

(d) process water per employee coming into contact with the product stream defined by industrial category and region

$$WT4R_{(e)} = \frac{WP4}{E4} \cdot WP2R' \cdot WU2R' \cdot \frac{WU4}{WI4}$$

Where: $WT4R_{(e)} = WD4R_{(e)}$

If: $WD4R_{(e)}$ $WT4R(e)$

The program used to calculate these regionally defined water use per employee values for each industrial category studied where data existed follows: the basic parameter definition for the model is applicable to the program.

PROGRAM LISTING
FOR
WATER USE PER EMPLOYEE MODEL

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```
      DIMENSION WP2R(17),WU2R(17),WI2R(17),E2R(17),NEG(17),
     XWD2R(17),IR(17),T(5),NRSIC(17),WT4R(17),TN(5)
      DATA NEG/17*0/
      ICOUNT=0
      ICK=1
    1 READ(10,1000,END=100) NSIC1,NSIC3,TN
 1000 FORMAT(2X,2I2,4X,5F10.0)
 1020 FORMAT(I2,I4,4X,5F10.0)
      IF(NSIC3.EQ.0) GO TO 15
      GO TO 1
    2 READ(10,1000,END=100) NSIC1,NSIC3,TN
    3 CONTINUE
      IF(NSIC3.EQ.0) GO TO 15
    4 CONTINUE
      DO 5 I=1,5
      IF(TN(I).LT.0.0) GO TO 2
    5 CONTINUE
      E4=TN(1)
      WI4=TN(2)
      WP4=TN(3)
      WD4=TN(4)
      WU4=TN(5)
      DO 10 I=1,17
      IF(NEG(I).NE.0) GO TO 8
      WT4R(I)=(WP4/E4)*WP2R(I)*WU2R(I)*(WU4/WI4)
      A=(WD4*E2*WD2R(I))/(WD2*E4*E2R(I))
      WT4R(I)=AMIN1(WT4R(I),A)
    8 CONTINUE
      IF(NEG(I).NE.0) WT4R(I)=0.0
   10 CONTINUE
      NSIC=NSIC1*100+NSIC3
      WRITE(6,2000) NSIC,WT4R
      WRITE(18) NSIC,WT4R
 2000 FORMAT(1X,I4,5X,10F10.5,/,10X,7F10.5,///)
C     ICOUNT=ICOUNT+1
C     IF(ICOUNT.GT.20) GO TO 100
C     THE ABOVE TWO STATEMENTS MUST BE REMOVED IN FULL RUNS
      GO TO 2
   15 CONTINUE
      E2=TN(1)
      WI2=TN(2)
      WP2=TN(3)
      WD2=TN(4)
      WU2=TN(5)
      DO 16 I=1,17
      NEG(I)=0
      IR(I)=0
      NRSIC(I)=0
      E2R(I)=0.0
      WI2R(I)=0.0
      WP2R(I)=0.0
      WD2R(I)=0.0
   16 WU2R(I)=0.0
```

```
      IF(ICK.EQ.0) GO TO 20
   18 READ(12,1020,END=25) IT,ITSIC,T
      IF(IT.LT.ICK) GO TO 25
   20 IR(IT)=IT
      NRSIC(IT)=ITSIC
      E2R(IT)=T(1)
      WI2R(IT)=T(2)
      WP2R(IT)=T(3)
      WD2R(IT)=T(4)
      WU2R(IT)=T(5)
      ICK=IT
      DO 21 I=1,5
      IF(T(I).LT.0.0) NEG(IT)=1
   21 CONTINUE
      GO TO 18
   25 ICK=0
      DO 30 I=1,17
      IF(IR(I).EQ.0) GO TO 29
      IF(NEG(I).GT.0) GO TO 28
      WP2R(I)=WP2R(I)*E2/(E2R(I)*WP2)
      WU2R(I)=(WU2R(I)*WI2)/(WU2*WI2R(I))
      GO TO 30
   28 WP2R(I)=0.0
      WU2R(I)=0.0
      GO TO 30
   29 NEG(I)=1
   30 CONTINUE
      GO TO 4
  100 STOP
      END
/*
//GO.FT10F001 DD DISP=SHR,DSN=          .WSORTNAT
//GO.FT12F001 DD DISP=SHR,DSN=          .WSORTREG
//GO.FT18F001 DD UNIT=2314,DISP=OLD,DSN=                WUPEMP,
//    VOL=SER=
//    DCB=(RECFM=VB,LRECL=80,BLKSIZE=7204)
/*
```

DISCUSSION OF THE INDUSTRIAL REQUIREMENTS COST MODEL

Overview

The industrial requirements cost model estimates the costs of required waste treatment assuming no industrial waste treatment facilities existed and estimates the costs of industrial waste treatment already in place, both in 1967 dollar terms. These two sets of values form the basis for estimating the cost of unfulfilled treatment requirements by industry. These unfulfilled requirements are then scheduled to be satisfied by 1976 to determine cash requirements needed. Capital and operation and maintenance costs are included in the analysis.

Some of the basic assumptions made in developing the model and preparing the associated data are:

A. Large industrial water users will most probably require their own waste treatment facilities rather than using municipal systems. Where this is not the case, industrial plants will choose to use a municipal system because of savings to that plant. This presumably represents a solution at a lower cost than calculated for that plant.

B. The large industries analyzed represent the approximately 15,000 largest water using industries, the number and distribution of establishments using in excess of 10 million gallons per year according to the 1963 Census of Manufactures--Water Use in Manufacturing (the last year for which this data is available by SIC code). The Census aggregates information on industrial water use from those industrial plants reporting annual intake of water in excess of 20 million gallons. Our analysis went to one lower classification of water users, to the 10 million gallon per year level, to represent the aggregate cost to all the smaller self-discharging industries treating or having to treat their own wastes.

C. These approximately 15000 largest water using industries discriminated as to number of plants within each of 320 SIC code categories were assumed to also represent the largest industries in in terms of manufacturing employment within their respective SIC code groupings.

D. Continuous flow through treatment processes were used to typify treatment processes used by these large industries. These processes were determined from an extensive literature research of recently published industrial solutions to waste treatment problems and a review of these findings by a team of industrial experts.

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E. Segregation of waste streams to pass through these unit processes was assumed where the literature or common sense dictated this approach.

F. Cost estimates for each unit process on the basis of quantity of waste treated were derived from comparable municipal unit process experience. These were modified upward as necessary to account for high strength wastes with the necessity to design for longer detention times and more chemical addition to effect changes in the waste streams sufficient for discharge.

G. Waste treatment units were also scaled upward to account for the number of days of operation of a facility, such that a food processing plant operating 150 days per year would have a higher daily flow rate than a textile mill operating 300 days per year discharging the same annual waste flow.

H. Waste treatment units were not scaled up to the degree of municipal systems in that the industrial plants were not considered to suffer from seasonal variability of infiltration and peaking flows from storm water runoff and illegal connections that municipal systems would have to face. In many cases equilization units were included to handle the operation variability of the industrial system.

I. Capital and operating and maintenance costs were adjusted to account for regional variation. This was done on the basis of water use region for capital costs and on State boundaries for O&M cost.

MATHEMATICAL FORMULATIONS

Overview

Basic relationships used in this analysis involve employment, location, type of industry, flow/employee, waste strength relative to municipal wastes, number of work days/year, treatment processes used, the amount of waste segregation. These relationships take the following form:

1. Cost = Function (flow, location, treatment processes used, amount of waste segregation, type of industry)

2. Flow = Function (employment, water use/employee, number of days worked/year, type of industry, location, waste strength relative to municipal wastes)

Definitions

The following mnemonics are used in the basic industrial cost model for requirements:

SFW = Waste strength scale factor
= 0.4 + 0.6 x (waste strength relative to municipal waste)

DAYR = days relative to annual flow
= 350/number of days worked per year

WU(I,J) = water use per employee (millions of gallons/year)
I = represents SIC code for industry
J = represents water use region (elsewhere defined)

OMCI(I,J) = relation of national labor cost to State to adjust O&M national cost values for industry

CCI(J) = relation of regional to national sewage treatment plant construction cost to adjust national capital cost values for industry

ADBR(I) = industrial plant data
I = 1 = State number
I = 2 = SIC Code
I = 3 = defined manufacturing employment
I = 4 =
I = 5 = water use region number

CFT(I,J,K) = cost coefficients

The cost function is of the form:

$$\text{Log}_{10}\,(\text{Cost}) = A + \log_{10}(\text{Flow})(B + C \times \log_{10}\,[\text{Flow}])$$

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I = 1 = A; I = 2 = B, I = 3 = C
J = 1 to number of treatment processes used maximum number of processes = 15
K = 1 = capital cost; K = 2 = O&M cost

DAYS = number of operating days per year for each industrial type
HWASTE = measure of waste strength (no parameter-oriented) relative to municipal wastes. This is a surrogate for treatment difficulty

TM(I,J) = treatment matrix: presentation (by SIC code for industry [I], and treatment process [J]) of decimal amounts of total waste stream treated by each process

TSM(I,J) = treatment scale matrix: allows alteration of flow being treated by SIC code (I), and waste treatment process (J). The intent of this factor is to allow TM to maintain its physical integrity while changing the cost function where recognized changes occur between the basic functions describing municipal costs and those observed by selected industries

Detail

The functional relationships for Cost and Flow are repeated:

1. Cost = Function (flow, location, treatment processes used, amount of waste segregation, type of industry)

2. Flow = Function (employment, water use/employee, number of days worked/year, type of industry, location, waste strength relative to municipal wastes

Base Flow = Employment x Water Use/Employee
where water use per employee is influenced by water use region in which the plant is located and the type of SIC code classification of the plant.

$$Q' = EMP \times WU(I,J)$$

The flow is modified to account for operating days per year and high strength wastes

$$Q'' = Q' \times DAYR$$
$$Q = Q'' \times SFW$$

The present model construct uses Q for capital cost and Q" for O&M cost. The scale factor for wastes was found from experience to represent increased design sizes of facilities with increased

waste strength because of requirements for longer detention times to effect comparable effluent wastewater quality. No comparable rule of thumb experience is known for O&M costs, so none was assumed. This piece of analysis should be researched further. The unit process O&M costs assumed were based on municipal experience and may have overstated manpower and waste handling requirements to industry--the latter in terms of grit removal from primary processes in a municipal system exceeding comparable industrial requirements. On the other hand, chemical addition by industry may be higher than that in a municipal system. These factors act to oppose one another. Hopefully, they strike a reasonable balance that a more exhaustive analysis will bear out.

For further discussion the term for basic flow will be Q.

The unit process cost relationship is of the general form:

$$\text{Log}_{10}\ (\text{Cost}) = A + \log_{10}\ (Q) \times (B + C \times \log_{10}\ [Q])$$

where Q is a modification of Q already derived and (Cost) is for each component of waste treatment used. Each factor in the above equation could be subscripted with a "t" to represent the treatment processes considered in the analysis.

Q is considered as that portion of the wastewater treated by each unit process in the industrial waste treatment system, realizing that waste segregation is a common industrial practice.

Q is therefore multiplied by elements of TM & TSM relating them to the industrial type (SIC code) and waste treatment process analyzed to obtain the Q values for each treatment process.

The cost algorithm relates annual flow to daily flow and converts the costs to dollar terms as necessary. The resultant capital costs are then multiplied by the regional capital cost factor for the plant location analyzed to bring construction costs to the expected value for that region. O&M costs are similarly scaled to national values.

The output from this model is a representation of unit process capital and operating and maintenance costs for each industrial plant analyzed in the nation, distinguished by State, SIC code, water use region, whether the industry is or is not in a Standard Metropolitan Statistical Area (a fact which was not used in this analysis but which has potential implications in the waste treatment strategies which industry might choose to apply . . . and which can be accomodated in the model), number of manufacturing employees, and basic process water discharged. It is a simple matter to further append the location of each industrial plant relative to the Environmental Protection Agency regional operating structure. This allows at least the following types of outputs or combinations

of outputs to be defined:

National totals
Selected SIC totals nationally
State totals
EPA Region totals
Water use Region totals

Other combinations can of course be drawn out of this set. The validity of the output is a function of the size of the set drawn. The analysis was not intended to represent the waste treatment costs of an individual industrial plant but an aggregate cost for various levels of detail for industry in general.

The output from this program was written to a magnetic data set in our case a disc, so that the appropriate levels of detail and types of output formats could be obtained without re-running the basic job each time. The running time of this job on an IBM 360/65 in an MVT environment is approximately one half hour. Many levels of detail, as indicated above, can be gleaned from running this job one time and storing the output.

Program

The program listing follows with all of its subroutines. Many of these routines such as SETUP, LGFOUR, LGTHRE, LGTWO are written to provide flexibility in the degree of detail of data required. The approach used throughout this entire analysis was to use the greatest degree of available applicable data, but to allow generally appliable data to be used at the most significant level for that industry type.

Let us take some hypothetical sets of SIC codes (outside the range of analysis for this study to avoid any confusion).

Data Set 1	Data Set 2	Industry Type
40xx	40xx	4031
41xx	403x	4032
4111	4031	4111
42xx	41xx	4115
	42xx	

In actually inputting these sets of data, the values "X" would be replaced by zero "0" since no SIC code beyond the two digit level ends in zero.

If we compare the first industry type (on the right) 4031 with data set 1, we see that there is no comparable 4-digit SIC code, nor is there any comparable 3-digit SIC code. There is a comparable 2-digit SIC code 40xx whose other data to define some aspect of this industry type would be used for industry 4031. Looking at data set 2 we find that there is indeed a 4-digit match up of SIC codes with industry type 4031 and the data associated with this match up would be used from this data set. So that the

data used from data sets 1 and 2 for industry 4031 would be as follows:

Data Set 1	Data Set 2	Industry Type
40xx	4031	4031

Looking at the next industry type 4032, we again see that for data set 1 the "best" match we can make is still only at the 2-digit level; i.e. 40xx. When we look at data set 2 we see an interesting situation--there is no 4032 but there is a 4031 and a 403x and also a 40xx . . . which one should be chosen and why? The correct choice is 430x as the "best" match-up between 4032 and data set 2. The reasoning goes like this:

> SIC code 4032 is a specific industry type distinct from 4031, but falling into the class 403x and also 40xx, so the other distinct SIC code 4031 should not also represent 4032. SIC 403x is a more specific SIC code indicator than 40xx and should more closely represent 4032. Therefore, the data used for industry type 4032 would be

Data Set 1	Data Set 2	Industry Type
40xx	403x	4032

> Comparable reasoning prompts the following choices to be used in our logical set. It should be noted before too much ire is generated that other schemes could have been chosen; this was convenient and the data was put together accordingly:

Data Set 1	Data Set 2	Industry Type
40xx	4031	4031
40xx	403x	4032
4111	41xx	4111
41xx	41xx	4115

One word of caution in setting up your data sets to run this program; input one SIC value larger than any you plan to use in your analysis for each data set or you will get into an unending loop. The other solution is of course to change the program. The program was written to solve a problem, not to be a software package for any user--unfortunately this, like most other programs written, has many of the idiosyncracies and hard ways to solve a simple problem that any analyst not overly concerned with programming niceties can conjure up.

The program is basically quite straightforward except as already noted and should be able to be easily followed by anyone familiar with FORTRAN IV and an IBM 360/65 system. The job was executed from a low speed terminal on a remote job entry basis. Many of the data sets used were also stored in the low speed terminal data set environment which necessitated much less job control language than if another environment were used.

PROGRAM LISTING
FOR
THE INDUSTRIAL REQUIREMENTS COST MODEL
AND
RELATED SUBROUTINES

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INDUSTRIAL REQUIREMENTS COST MODEL

L-S-T DATA SET ---> WCOSTJOB <---

```
// EXEC FORGCLGG,REGION=180K,TIME=1440
//SOURCE.SYSIN DD DATA
      DOUBLE PRECISION DTCC(16,2),DTOMC(16,2),DQ,DTQ,DEMP,DWU,DTM,DSF
      DOUBLE PRECISION DCOEF(3),DCAPF,DOMF,DAYR,DSFW,DSFACT
C     DOUBLE PRECISION
      INTEGER  ADBR(6),ODBR(6)
      DIMENSION TCC(16,2),I2(5),PCC(16),POMC(16),
     XTOMC(16,2),T3(3),CCI(17),OMCI(2,51),CFT(3,16,2),I4(5),I3(5)
      COMMON TM(50,16,2),TSM(50,16,2),WU(50,18),DAY(50,2),WASTE(50,2)
C     MUST INSERT READ FOR NUMBER OF TREATMENT TYPES AND SMSA DISCRIMINATOR HERE .
C     NTRT=NO. OF TREATMENT PROCESSES DEFINED FOR PROBLEM
C     NSMSAC=CHOICE TO DISCRIMINATE BETWEEN NON-SMSA AND SMSA
C      NSMSAC=BLANK OR ZERO...NO DISCRIMINATION
C      NSMSAC=NON-ZERO.........DISCRIMINTAION  AND MUST PROVIDE SUFFICIENT
C                              DATA TO HANDLE THIS
C     NOTE  .. MS .. DEFINES SMSA DISCRIMINATOR THROUGHOUT PROGRAM
C
      READ(5,1093) NTRT,NSMSAC
C
 1093 FORMAT(2I2)
      IF(NTRT.EQ.0.OR.NTRT.GT.15) GO TO 300
      IF(NSMSAC.EQ.0) MS=1
      IF(NSMSAC.NE.0) MS=2
      NTRT=NTRT+1
      IERROR=0
      NUM=0
C     READ IN COST FACTOR MATRICIES
C     READ STATE DIFFERENCES FOR O&M
      J=1
    1 READ(8,1090,END=2) (OMCI(I,J),I=1,2)
      J=J+1
      GO TO 1
C     READ IN REGIONAL CAPITAL COST FACTORS
    2 READ (9,1091) (CCI(J),J=1,17)
C     INITIALIZE THEN READ IN PROCESS COST FUNCTION COEFFICIENTS
      DO 3 I=1,3
      DO 3 J=1,NTRT
      DO 3 K=1,2
    3 CFT(I,J,K)=0.0
    4 READ(11,1092,END=6) N,K,T3
      N=N+1
      DO 5 I=1,3
    5 CFT(I,N,K)=T3(I)
      GO TO 4
C     FORMAT1090 DEFINES O&M COEFFICIENTS BY STATE: CALLED WOMCOST
 1090 FORMAT(F2.0,3X,F10.0)
C     FORMAT 1091 DEFINES REGIONAL CAPITAL COST FACTORS: CALLED WCAPCOST
 1091 FORMAT(17F5.0)
C     FORMAT 1092 DEFINES COST FUNCTION COEFFICIENTS FOR A,B,C BY TYPE
```

```
C       TREATMENT AND BY CAPITAL AND O&M COST.. K=1 AND K=2  RESPECTIVELY
C         EQUATION OF THE FORM LOG(COST)=A+LOG(FLOW)(B+C*LOG(FLOW))
 1092 FORMAT(I2,I1,37X,3F10.0)
    6 CONTINUE
      READ(10,1000,END=500) ADBR
C     THESE ARE TRAPS FOR RECOGNIZED D&B BAD DATA...
      IF(ADBR(3).GE.3) ADBR(3)=1
      IF(ADBR(3).EQ.2.AND.ADBR(2).EQ.3291) ADBR(3)=1
C     ADBR(1)= STATE NUMBER
C     ADBR(2)= SIC#1 NUMBER
C     ADBR(3)= EXPONENT ON EMPLOYMENT
C     ADBR(4)= BASE 10 MULTIPLIER FOR EMPLOYMENT
C     ADBR(5)= REGION NUMBER
C     ADBR(6)= SMSA CODE
CFORMAT 1000 DEFINES DUN AND BRADSTREET DATA
 1000 FORMAT(I2,13X,I4,4X,I1,I3,I2,I1)
C     BEGIN PROGRAM SETUP HERE FOR VARIABLE DATA MATRICIES
      IFILL=0
      SIC=ADBR(2)
      ISIC=SIC
      SIC4=(ISIC/100)*100
      CALL SETUP (SIC4,IFILL,MS)
      IFILL= 1
      CALL LGTWO (SIC,I2,I3,I4,IFILL,SIC2)
C     IFILL= 0  IF MATCH CAN BE MADE
C     IFILL = 500 IF VALUE IN ARRAY IS LARGER THAN THE 2 DIGIT SIC
C               THIS IS ERROR AND PROGRAM SHOULD STOP
C     IFILL = 9999 IF THE ARRAY IS READ AND NO SIC2 IS AVAILABLE FOR USE
C                  ARRAYS MUST BE RESET AND RUN WITH SAME D&B RECORD
      IF (IFILL-500)  8,79,79
    8 CALL LGTHRE (SIC,I2,I3,I4,IFILL,SIC2)
C     IFILL WILL= 0  OR 9999 IF NO VALUE.GE. THAN SIC IN ARRAY
      IF (IFILL-500) 10,10,71
   10 CALL LGFOUR (SIC,I2,I3,I4,IFILL,SIC2)
C     IFILL WILL BE AS IFILL IN (THREE)
      IF(IFILL-500) 12,12,72
   12 CONTINUE
C     ALL ARRAYS ARE NOW SET UP  I4 CONTAINS LOCATIONS OF
C       ALL VARIABLES WHERE SIC VALUES CAN BE FOUND
C            I4(1) = TM MATRIX
C            I4(2) = WU MATRIX
C            I4(3) = TSM MATRIX
      DO 13 J=1,2
      DO 13 I=1,NTRT
      DTCC(I,J)=0.0
   13 DTOMC(I,J)=0.0
      GO TO 40
C     SETUP OF DOUBLE PRECISION VALUES AND WHETHER SIC IS SAME OCCURS HERE
   14 DO 16 I=1,6
   16 ODBR(I)=ADBR(I)
   18 READ (10,1000,END=500) ADBR
C     THESE ARE TRAPS FOR RECOGNIZED D&B BAD DATA...
      IF(ADBR(3).GE.3) ADBR(3)=1
      IF(ADBR(3).EQ.2.AND.ADBR(2).EQ.3291) ADBR(3)=1
      IF(ADBR(5).GT.17) GO TO 18
      IF(ODBR(5)-ADBR(5)) 60,20,22
   20 IF(ODBR(2)-ADBR(2)) 24,40,73
   22 IF(ODBR(2)-ADBR(2)) 24,74,74
   24 DO 25 J=1,MS
      DO 25 I=1,NTRT
```

```
      TCC(I,J)=DTCC(I,J)
   25 TOMC(I,J)=DTOMC(I,J)
      WRITE(30,6000)ODBR(2),ODBR(5),NUM,((TCC(I,J),I=2,16),J=1,MS),
     X((TOMC(I,J),I=2,16),J=1,MS)
      WRITE(32,6000) ODBR(2),ODBR(5),NUM,((TCC(I,J),I=2,16),J=1,MS),
     X((TOMC(I,J),I=2,16),J=1,MS)
 6000 FORMAT(33A4)
      NUM=0
      DO 30 J=1,2
      DO 30 I=1,NTRT
      DTCC(I,J)=0.0
   30 DTOMC(I,J)=0.0
      GO TO 100
C     STATEMENTS  40---50  DEFINE PROGRAM ACTIVITY
   40 CONTINUE
      IIII=I4(4)
      IIIII=I4(5)
      DAYS=DAY(IIII,2)
      HWASTE=WASTE(IIIII,2)
      CALL LGSCLQ (DAYS,DAYR)
      CALL LGSCLW (HWASTE,SFW)
      DSFW=SFW
      EMP=ADBR(4)*10**ADBR(3)
C     WRITE(6,4500) I4(1),I4(2),I4(3),I4(4),I4(5),ADBR(2)
 4500 FORMAT(' I1=',I4,' 2=',I4,' 3=',I4,' 4=',I4,' 5=',I4,'SIC=',I5)
      I=I4(2)
      J=ADBR(5)+1
C     J=WATER USE REGION
C     DQ=BASIC FLOW TO USE IN EACH SUBROUTINE
      DEMP=EMP
      DWU=WU(I,J)
      DQT=DEMP*DWU*DAYR
      CQT=DQT
C     K=1= NON-SMSA  :  K=2=SMSA
      K=ADBR(6)+1
C     THE NEXT SET OF STATEMENTS WILL HAVE TO BE CHANGED AS THE DATA IMPROVES
      IF(K.LT.1) K=1
      IF(K.GT.2) K=2
      II=I4(1)
C     AT THIS POINT CHECK SMSA DISCRIMINATOR TO SET K VALUE FOR EACH PLANT
      IF(NSMSAC.EQ.0) K=1
      III=I4(3)
      DO 50 J=2,NTRT
      IF(TM(II,J,K).EQ.0.0) GO TO 510
C     IF THE PERCENT OF PROCESS WATER IN THE J TH TREATMENT PROCESS =0
C        THERE IS NO NEED TO CALCULATE COSTS
      DTM=TM(II,J,K)
      DQ=DQT*DTM
      IF(DQ.LT.0.05) GO TO 510
      DO 49 L=1,2
      IF(TSM(III,J,L).EQ.0.0) GO TO 491
C     IF THE SCALE FACTOR FOR THE WATER GOING TO BE TREATED =0
C       FOR CAPITAL COST ... L=1  :  OR O&M COST... L=2
C        THEN DON'T  CALCULATE THIS COST
      DSF=TSM(III,J,L)
      DSFACT=DSF
      IF(L.EQ.1) DSFACT=DSF*DSFW
      MM=0
      DO 41 M=1,3
      DCOEF(M)=CFT(M,J,L)
```

```
      IF(DCOEF(M).EQ.0.0) MM=MM+1
   41 CONTINUE
C     IF ALL COST COEFICIENTS = 0  DON'T CALCULATE COSTS
      IF (MM.EQ.3) GO TO 491
      NUM=NUM+1
C     NOTE  NUM SHOULD EQUAL TWICE THE NUMBER OF RECORDS READ AT MOST
      CALL LGCFN (DQ,DSFACT,DCOEF,DCOST,L)
      GO TO (42,43),L
   42 IR=ADBR(5)
      DCAPF=CC1(IR)
      DTCC(J,K)=DTCC(J,K)+DCOST*DCAPF
      PCC(J)=DCOST*DCAPF
      GO TO 49
   43 DO 44 JA=1,51
      JB=JA
      B=ADBR(1)
      IF(B.EQ.OMC1(1,JA)) GO TO 45
   44 CONTINUE
      GO TO 75
   45 DOMF=OMC1(2,JB)
      DTOMC(J,K)=DTOMC(J,K)+DCOST/DOMF
      POMC(J)=DCOST/DOMF
      GO TO 49
  491 IF(L.EQ.2) GO TO 492
      PCC(J)=0.0
      GO TO 49
  492 POMC(J)=0.0
   49 CONTINUE
      GO TO 50
  510 PCC(J)=0.0
      POMC(J)=0.0
   50 CONTINUE
C     WRITE(6,4610) ADBR(2),EMP,CQT
C     WRITE(6,4611) (PCC(J),J=2,NTRT)
C     WRITE(6,4611) (POMC(J),J=2,NTRT)
 4610 FORMAT('  SIC, EMP, TOT FLOW',I8,2F15.6)
 4611 FORMAT(1X,8E12.5,/,1X,7E12.5)
      WRITE(40,6001) ADBR(1),ADBR(2),ADBR(5),ADBR(6),EMP,CQT,
     X(PCC(I),I=2,16),(POMC(I),I=2,16)
 6001 FORMAT(36A4)
 4600 FORMAT(I5,1X,I3,1X,I2,2X,10D11.3,/,14X,5D11.3)
C     WRITE(6,4600) ADBR(2),ADBR(5),ADBR(6),(DTCC(I,1),I=2,NTRT)
C     IF(NSMSAC.EQ.0) GO TO 52
C  51 WRITE(6,4600)ADBR(2),ADBR(5),ADBR(6),(DTCC(I,2),I=2,NTRT)
C  52 WRITE(6,4600)ADBR(2),ADBR(5),ADBR(6),(DTOMC(I,1),I=2,NTRT)
      IF(NSMSAC.EQ.0) GO TO 54
C  53 WRITE(6,4600)ADBR(2),ADBR(5),ADBR(6),(DTOMC(I,2),I=2,NTRT)
   54 CONTINUE
      GO TO 14
   60 CONTINUE
C     WILL WRITE TOTALS HERE FOR REGIONAL CHANGE THEN CK FOR SIC CHANGE
      DO 61 J=1,MS
      DO 61 I=2,NTRT
      TCC(I,J)=DTCC(I,J)
   61 TOMC(I,J)=DTOMC(I,J)
C     WRITE (30,6000) ODBR(2),ODBR(5),NUM,((TCC(I,J),I=2,16),J=1,MS),
C    X((TOMC(I,J),I=2,16),J=1,MS)
C     WRITE(32,6000) ODBR(2),ODBR(5),NUM,((TCC(I,J),I=2,16),J=1,MS),
C    X((TOMC(I,J),I=2,16),J=1,MS)
      NUM=0
```

```
      DO 62 J=1,2
      DO 62 I=2,NTRT
      DTCC(I,J)=0.0
   62 DTOMC(I,J)=0.0
      IF(IERROR.EQ.60) GO TO 600
      IF(ODBR(2)-ADBR(2)) 100,40,76
   70 CONTINUE
C     THIS AREA CAPTURES GLITCHES AND SETS PROGRAM UP TO START AGAIN
      WRITE(6,2000) ADBR
 2000 FORMAT(' DATA OUT OF ORDER  ',I2,13X,I4,4X,I1,I3,I2,I1)
      WRITE(6,5070)
 5070 FORMAT(' STMT 70')
      GO TO 90
   71 WRITE(6,5071)
 5071 FORMAT(' STMT 71')
      GO TO 90
   72 WRITE(6,5072)
 5072 FORMAT(' STMT 72')
      GO TO 90
   73 WRITE(6,5073)
 5073 FORMAT('STMT 73')
      GO TO 90
   74 WRITE(6,5074)
 5074 FORMAT(' STMT 74')
      GO TO 90
   75 WRITE(6,5075)
 5075 FORMAT(' STMT 75')
      GO TO 90
   76 WRITE(6,5076)
 5076 FORMAT(' STMT 76')
      GO TO 90
   77 WRITE(6,5077)
 5077 FORMAT(' STMT 77')
      GO TO 90
   78 WRITE(6,5078)
 5078 FORMAT(' STMT 78')
      GO TO 90
   79 WRITE(6,5079)
 5079 FORMAT(' STMT 79')
      GO TO 90
   90 IERROR=IERROR+1
      IF(IERROR.GE.10) GO TO 600
      GO TO 200
  100 CONTINUE
C     NEW I4(I) VALUES ARE FOUND HERE.............
      SIC=ADBR(2)
      SIC2=SIC/100.
      IF(SIC2.GT.38.0) GO TO 77
      SIC4=(SIC/100.)*100.
      CALL LGTWO (SIC,I2,I3,I4,IFILL,SIC2)
      IF(IFILL-500) 108,78,200
  108 CALL LGTHRE (SIC,I2,I3,I4,IFILL,SIC2)
      IF(IFILL-500) 110,110,200
  110 CALL LGFOUR (SIC,I2,I3,I4,IFILL,SIC2)
      IF(IFILL-500) 112,112,200
  112 GO TO 40
  200 CONTINUE
      IFILL=1
C     NEW MATRIX SETUP OCCURS HERE REQUIRING THAT NEW I4(I) VALUES
C         ALSO BE CALCULATED
```

```
      SIC=ADBR(2)
      ISIC=SIC
      SIC4=(ISIC/100)*100
      CALL SETUP (SIC4,IFILL,MS)
      GO TO 100
  500 IERROR=60
      GO TO 60
  600 WRITE (6,2100) IERROR
      GO TO 601
  300 WRITE(6,3000) NTRT
 3000 FORMAT(' NONE OR BAD DATA FOR NTRT=',I5)
  601 CONTINUE
 2100 FORMAT(' IERROR VALUE = ', I10)
      DEBUG SUBCHK,TRACE,INIT(IFILL,DCOST),UNIT(43)
      AT 6
      TRACE ON
      AT 601
      TRACE OFF
      STOP
      END
      SUBROUTINE SETUP (SIC,IFILL,MS)
      COMMON TM(50,16,2),TSM(50,16,2),WU(50,18),DAY(50,2),WASTE(50,2)
C
C     INITIALIZE MATRICIES
      DO 2 I=1,50
      DO 1 J=1,16
      DO 1 K=1,2
      TM(I,J,K)=9999.
    1 TSM(I,J,K)=9999.
      DO 2 J=1,18
    2 WU(I,J)=9999.
C     BEGIN READING INTO MATRICIES
      DO 5 I=1,50
      DO 5 J=1,2
      DAY(I,J)=9999.
    5 WASTE(I,J)=9999.
    3 N=10
      DO 50 M=1,5
      N=N+2
      GO TO (10,20,30,35,40),M
   10 IC=1
  101 DO 11 K=1,MS
   11 READ(N,1900,END=50) (TM(IC,J,K),J=1,16)
      IF(TM(IC,1,1).LT.SIC) GO TO 101
 1010 FORMAT(2(2X,9(E10.3,2X),/))
 1000 FORMAT (1X,10(E11.4,1X),/,1X,6(E11.4,1X))
C     DO 111 K=1,MS
C 111 WRITE(6,1000) ((TM(IC,J,K),J=1,16),K=1,MS)
      IC=IC+1
      IF(IC.LT.49) GO TO 101
      GO TO 50
   20 IC=1
   21 READ(N,1910,END=50) ((TSM(IC,J,K),J=1,16),K=1,2)
      IF(TSM(IC,1,1).LT.SIC) GO TO 21
C     WRITE(6,1000) ((TSM(IC,J,K),J=1,16),K=1,2)
C
      IC=IC+1
      IF(IC.LT.49) GO TO 21
      GO TO 50
   30 IC=1
```

```
C      THIS FORMATTED READ MUST CONFORM TO JOB "WUSE3800" OUTPUT
   31  READ(N,5000,END=50) (WU(IC,J),J=1,18)
       IF(WU(IC,1).LT.SIC) GO TO 31
C      WRITE(6,1010) (WU(IC,J),J=1,18)
 5000  FORMAT(1844)
       IC=IC+1
       IF(IC.LT.49) GO TO 31
       GO TO 50
   35  IC=1
C      FORMAT 1930 DEFINES NUMBER OF WORKDAYS/YEAR FOR SUBROUTINE LGSCLQ
C        DATA SET NAME  B.V00005.WDAY
   36  READ(N,1930,END=50) (DAY(IC,J),J=1,2)
       IF(DAY(IC,1).LT.SIC) GO TO 36
C      WRITE(6,1020) (DAY(IC,J),J=1,2)
       IC=IC+1
       IF(IC.LT.49) GO TO 36
       GO TO 50
   40  IC=1
   41  READ(N,1930,END=50) (WASTE(IC,J),J=1,2)
       IF(WASTE(IC,1).LT.SIC) GO TO 41
C      WRITE(6,1020) (WASTE(IC,J),J=1,2)
       IC=IC+1
       IF(IC.LT.49) GO TO 41
       GO TO 50
C      FORMAT  1930  ALSO DEFINES INPUT FOR WASTE STRENGTH IN MG/L OF B.O.D.
 1930  FORMAT(F4.0,1X,F10.0)
 1020  FORMAT(1X,F5.0,5X,F10.0)
   50  CONTINUE
       IFILL=1
C      FORMAT 1910 DEFINES INPUT FOR TREATMENT TYPE & DECIMAL FLOW FACTORS
 1900  FORMAT(F4.0,1X,15F5.0)
C
C      FORMAT 1910 DEFINES INPUT FOR TREATMENT SCALE MATRIX NOW ALMOST
C        OBSOLETE.  VALUES SHOULD BE=1.0 EXCEPT FOR FINE TUNING.
 1910  FORMAT(F4.0,1X,15F5.0,/,F4.0,1X,15F5.0)
C
C      FORMAT 1920 HAS NO USE NOW EXCEPT FOR DEBUG... WAS USED FOR WATER USE
C          PER EMPLOYEE
 1920  FORMAT(F4.0,1X,17F5.0)
C
   51  CONTINUE
       DEBUG SUBCHK,SUBTRACE,UNIT(43)
       AT 3
       TRACE ON
       AT 51
       TRACE OFF
       REWIND 12
       REWIND 14
       REWIND 16
       REWIND 18
       REWIND 20
       RETURN
       END
/*
//GO.FT05F001 DD DISP=SHR,DSN=          .WCARD1
//GO.FT08F001 DD DISP=SHR,DSN=          .WOMCOST
//GO.FT09F001 DD DISP=SHR,DSN=          .WCAPCOST
//GO.FT10F001 DD DISP=OLD,DSN=    .SORT69,VOL=SER=      ,UNIT=(2400-3),
//    DCB=(RECFM=FB,LRECL=30,BLKSIZE=15000),LABEL=(,SL)
//GO.FT11F001 DD DISP=SHR,DSN=           WCSTABC2
```

```
//GO.FT12F001 DD DISP=SHR,DSN=        .WTMACTSL
//GO.FT14F001 DD DISP=SHR,DSN=        .WTSM2
//GO.FT16F001 DD VOL=SER=      ,DSN=             .WUPEMP.LOW,
//    DCB=(RECFM=FB,LRECL=72,BLKSIZE=7200),UNIT=2314,DISP=OLD
//GO.FT18F001 DD DISP=SHR,DSN=        .WDAY
//GO.FT20F001 DD DISP=SHR,DSN=        .WWASTE
//GO.FT30F001 DD DUMMY
//GO.FT32F001 DD DUMMY
//GO.FT40F001 DD UNIT=2314,VOL=SER=      ,DISP=(NEW,KEEP),
//    DSN=              PLANT.DATA,SPACE=(TRK,(250,50),RLSE),
//    DCB=(RECFM=FB,LRECL=144,BLKSIZE=7200)
//GO.FT43F001 DD DUMMY
/*
```

```
        L-S-T  DATA SET ---> LGTWO    <---


      SUBROUTINE LGTWO(SIC,I2,I3,I4,IFILL,SIC2)
      DIMENSION I2(5),I3(5),I4(5)
      COMMON TM(50,16,2),TSM(50,16,2),WU(50,18),DAY(50,2),WASTE(50,2)
  100 CONTINUE
      IF(IFILL.EQ.0) GO TO 2
      DO 1 I=1,5
      I2(I)=1
      I3(I)=1
    1 I4(I)=1
      IFILL=0
    2 CONTINUE
C     DO 3 I=1,5
C     IF(I4(I).GT.I2(I)) I2(I)=I4(I)
C     IF(I3(I).GT.I2(I)) I2(I)=I3(I)
C   3 CONTINUE
      ISIC=SIC
      SIC2=(ISIC/100)*100
C     I=1=TM=TREATMENT MATRIX
C     I=2=WU=WATER USE MATRIX
C     I=3=TSM=TREATMENT SCALE MATRIX
C     I=4=DAY=DAYS WORKED/YR  MATRIX
C     I=5=WASTE=AVERAGE WASTE STRENGTH (MG/L)  BOD
      DO 19 I=1,5
      N=I2(I)
      GO TO (4,6,8,10,12),I
    4 T1=TM(N,1,1)
      IF(SIC2-TM(N,1,1)) 20,18,5
    5 N=N+1
      GO TO 4
    6 T2=WU(N,1)
      IF(SIC2-WU(N,1)) 22,18,7
    7 N=N+1
      GO TO 6
    8 T3=TSM(N,1,1)
      IF(SIC2-TSM(N,1,1)) 24,18,9
    9 N=N+1
      GO TO 8
   10 T4=DAY(N,1)
      IF(SIC2-DAY(N,1)) 26,18,11
   11 N=N+1
      GO TO 10
   12 T5=WASTE(N,1)
      IF(SIC2-WASTE(N,1)) 28,18,13
   13 N=N+1
      GO TO 12
   18 I2(I)=N
   19 CONTINUE
      GO TO 30
   20 IF(TM(N,1,1).EQ.9999.) GO TO 50
      IFILL=500
      RETURN
   22 IF(WU(N,1).EQ.9999.) GO TO 50
      IFILL=500
      RETURN
```

```
24 IF(TSM(N,1,1).EQ.9999.) GO TO 50
   IFILL=500
   RETURN
26 IF(DAY(N,1).EQ.9999.) GO TO 50
   IFILL=500
   RETURN
29 IF(WASTE(N,1).EQ.9999.) GO TO 50
   IFILL=500
   RETURN
30 DO 31 I=1,5
   I3(I)=I2(I)
31 I4(I)=I2(I)
   RETURN
50 IFILL=9999
51 CONTINUE
   DEBUG SUBCHK,SUBTRACE,TRACE,INIT(IFILL,N,T1,T2,T3,T4,T5),UNIT(43)
   AT 100
   TRACE ON
   AT 51
   TRACE OFF
   RETURN
   END
```

L-S-T DATA SET ---> LGTHRE <---

```
      SUBROUTINE LGTHRE(SIC,I2,I3,I4,IFILL,SIC2)
      DIMENSION I2(5),I3(5),I4(5)
      COMMON TM(50,16,2),TSM(50,16,2),WU(50,18),DAY(50,2),WASTE(50,2)
C     I=1=TM=TREATMENT MATRIX
C     I=2=WU=WATER USE MATRIX
C     I=3=TSM=TREATMENT SCALE MATRIX
C     I=4=DAY=DAYS WORKED/YEAR
C     I=5=WASTE=AVERAGE WASTE STRENGTH (MG/L)  BOD
    1 ISIC=SIC
      SIC3=(ISIC/10)*10
C     DO 3 I=1,5
C     IF(I4(I).GT.I3(I)) I3(I)=I4(I)
    3 CONTINUE
      DO 30 I=1,5
      N=I3(I)
      GO TO (4,6,8,68,70),I
    4 IF(SIC3-TM(N,1,1)) 12,10,5
    5 N=N+1
      GO TO 4
    6 IF(SIC3-WU(N,1)) 14,10,7
    7 N=N+1
      GO TO 6
    8 IF(SIC3-TSM(N,1,1)) 16,10,9
    9 N=N+1
      GO TO 8
   68 IF(SIC3-DAY(N,1)) 17,10,69
   69 N=N+1
      GO TO 68
   70 IF(SIC3-WASTE(N,1)) 18,10,71
   71 N=N+1
      GO TO 70
   10 I3(I)=N
      GO TO 30
   12 IF(TM(N,1,1).EQ.9999.) GO TO 50
      GO TO 20
   14 IF(WU(N,1).EQ.9999.) GO TO 50
      GO TO 20
   16 IF(TSM(N,1,1).EQ.9999.) GO TO 50
      GO TO 20
   17 IF(DAY(N,1).EQ.9999.) GO TO 50
      GO TO 20
   18 IF(WASTE(N,1).EQ.9999.) GO TO 50
      GO TO 20
   20 I3(I)=I2(I)
      IF(I4(I)-I2(I)) 22,30,30
   22 I4(I)=I2(I)
   30 CONTINUE
      RETURN
   50 IFILL=9999
   51 CONTINUE
      SIC2=(ISIC/100)*100
      DEBUG SUBCHK,SUBTRACE,UNIT(43)
      AT 1
      TRACE ON
```

```
AT 51
TRACE OFF
RETURN
END
```

L-S-T DATA SET ---> LGFOUR <---

```
      SUBROUTINE LGFOUR (SIC,I2,I3,I4,IFILL,SIC2)
      DIMENSION I2(5),I3(5),I4(5)
      COMMON TM(50,16,2),TSM(50,16,2),WU(50,18),DAY(50,2),WASTE(50,2)
C     I=1=TM=TREATMENT MATRIX
C     I=2=WU=WATER USE MATRIX
C     I=3=TSM=TREATMENT SCALE MATRIX
C     I=4=DAY=DAYS WORKED/YEAR
C     I=5=WASTE=AVERAGE WASTE STRENGTH (MG/L)  BOD
    1 ISIC=SIC
      SIC4=ISIC
      DO 30 I=1,5
      N=I4(I)
      GO TO (4,6,8,68,70),I
    4 IF(SIC4-TM(N,1,1)) 12,10,5
    5 N=N+1
      GO TO 4
    6 IF(SIC4-WU(N,1)) 14,10,7
    7 N=N+1
      GO TO 6
    8 IF(SIC4-TSM(N,1,1)) 16,10,9
    9 N=N+1
      GO TO 8
   68 IF(SIC4-DAY(N,1)) 17,10,69
   69 N=N+1
      GO TO 68
   70 IF(SIC4-WASTE(N,1)) 18,10,71
   71 N=N+1
      GO TO 70
   10 I4(I)=N
      GO TO 30
   12 IF(TM(N,1,1).EQ.9999.) GO TO 50
      GO TO 20
   14 IF(WU(N,1).EQ.9999.) GO TO 50
      GO TO 20
   16 IF(TSM(N,1,1).EQ.9999.) GO TO 50
      GO TO 20
   17 IF(DAY(N,1).EQ.9999.) GO TO 50
      GO TO 20
   18 IF(WASTE(N,1).EQ.9999.) GO TO 50
      GO TO 20
   20 I4(I)=I3(I)
   30 CONTINUE
      RETURN
   50 IFILL=9999
   51 CONTINUE
      SIC2=(ISIC/100)*100
      DEBUG SUBCHK,SUBTRACE,UNIT(43)
      AT 1
      TRACE ON
      AT 51
      TRACE OFF
      RETURN
      END
```

```
      L-S-T  DATA SET ---> LGCFN    <---



      SUBROUTINE LGCFN (DQ,DSF,DCOEF,DCOST,L)
      DOUBLE PRECISION DQ,DSF,DCOEF(3),DCOST,DA,DB,DC,DQC,DQD
     1 DA=DCOEF(1)
      DB=DCOEF(2)
      DC=DCOEF(3)
C     COST FUNCTION IS OF THE BASIC FORM :
C      DLOG10(COST)=DA+(DB+DC*DLOG10(DQD))*DLOG10(DQD)
C
C     CAPITAL COST BASED ON MGD  AND REPRESENTS TOTAL COST IN DOLLARS
C
C     O&M COST BASED ON MGD  AND REPRESENTS COSTS IN CENTS
C
C     PER  1000 GALLONS OF WASTE TREATED
C
C     CAPITAL COST FLOW  DQD=DQC/350  OPERATING DAYS PER YEAR
C
C     O&M  COST FLOW  DQD=DQC/350  OPERATING DAYS PER YEAR
C
C     CAPITAL COSTS WILL COME OUT IN DOLLARS FROM DCOST
C
C     O&M  COSTS WILL HAVE TO BE MULTIPLIED BY (DQC*1000) TO GET TOTAL
C        CENTS.....THEN DIVIDED BY 100 TO GET DOLLAR VALUES.
C          I.E.  SAME AS (DQC*10)*DCOST
C
      DQC=DQ*DSF
      IF(DQC.LT.0.0005) GO TO 75
      DQD=DQC/350.
      IF(DC.LE.0.0) GO TO 20
      DCOST=DA+(DLOG10(DQD))*(DB+(DC*DLOG10(DQD)))
      GO TO 50
   20 DCOST=DA+DB*DLOG10(DQD)
   50 DCOST=DEXP(DCOST*2.3025851)
      GO TO (90,70),L
C       IF  L=1...CAPITAL COST  :   L=2 ... O&M COST
   70 DCOST=DCOST*(DQC*10.)
      GO TO 90
   75 DCOST=0.0
   90 CONTINUE
   91 CONTINUE
      DEBUG SUBCHK,SUBTRACE,UNIT(43)
      AT 1
      TRACE ON
      AT 91
      TRACE OFF
      RETURN
      END
```

L-S-T DATA SET ---> LGSCLQ <---

```
      SUBROUTINE LGSCLQ (DAYS,DAYR)
      DOUBLE PRECISION DAYR
      DAYSS=DAYS
C     THIS PROGRAM CALCULATES SIZING BASED ON DURATION OF FLOW
C       IF NO. OF DAYS IS GREATER THAN 350 ( 7DAYS/WK FOR 50 WKS)
C             DAYR=1.0
C       IF NO. OF DAYS IS LESS THAN 350 SCALE PLANT FLOW BY DAYR WHERE:
C             DAYR=350./DAYSS
C         IF NO. OF DAYS IS UNSPECIFIED.. IE. EQUAL TO ZERO .. DAYR=350./250.
      IF(DAYS.LT.350) GO TO 10
    3 DAYR=1.0
      RETURN
   10 IF(DAYS.EQ.0.0) DAYSS=250.
      DAYR=350.0/DAYSS
      RETURN
      END
```

L-S-T DATA SET ---> LGSCLW <---

```
      SUBROUTINE LGSCLW (HS,SF)
C
C     THIS ROUTINE CALCULATES THE SCALE FACTOR TO USE FOR CAPITAL COSTS
C     BASED ON HIGH STRENGTH WASTE (HS)  VS MUNICIPAL WASTE  (400MG/L BOD)
C
      IF(HS.GT.400) GO TO 10
      SF=1.0
      RETURN
   10 SF=0.6*(HS/400.0)+0.4
      RETURN
      END
```

DISCUSSION OF THE OUTPUT PROGRAM FOR THE INDUSTRIAL REQUIREMENTS COST MODEL

Overview

This program serves two basic purposes. The first is to incorporate some of the cost factors which could most appropriately be varied such as the interest rate and rate of replacement of capital, respectively 7.7 percent and 5 percent per year as used in one final analyses. Non-structural costs associated with capital outlays for construction such as engineering, legal and administrative fees, and some added land costs were included as scaling factors for appropriate levels of Standard Industrial Classification Codes for industry. The second purpose, and most consuming portion of the program, is the preparation of the data for display. Maximums, minimums, totals, averages, and standard deviations of many factors are determined and the input data which requires preparation by being appropriately sorted is then run through this analysis and printed out. This operation required approximately one and one-and-a-half minutes of computer time on the IBM 360/65 in an MVT environment and consists primarily of I/O interrupts.

There is little need to go through any detailed explanation of this program. However, about three points for clarification can be quickly made.

1. The term PC is the total annual cost for each industry and is made up of three components; interest 7.7 percent, replacement of capital 5 percent both of total capital cost, and annual operation and maintenance cost.
2. After the read statements from file 40 there is a statement JSK= JJSIC/100 which can be changed depending on the level of detail required for SIC code output.
3. Intermediate programs are required to sort the output from the COSTJOB into the order desired for output. The discriminates used after the read statements from file 40 are the determining factors as to how the sorts should be made. This next comment is directed specifically at those persons actually planning to run this program: If an output requiring the EPA regions is required--as shown in the program coding--another intermediate program must be run to add the EPA regions to the output file of COSTJOB according to State number, or add this data to the input of COSTJOB and pass the data through it.

Definition of Terms Used

Input

JS - State number based on Dun and Bradstreet numbering
JSIC - 4-digit SIC code for industrial plant used
JWREG - Census of manufacturers water use region as modified

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(elsewhere defined)

JSMSA - Whether the industrial plant is located or not located in a Standard Metropolitan Statistical Area (not used as a discriminator in this analysis)

EMP - Number of manufacturing employees working at the industrial plant as determined from Dun and Bradstreet data

CQT - Basic total treatable flow as calculated in the COSTJOB already discussed

TCC(I) - Total capital cost for each treatment process prescribed for a particular SIC code as discussed in COSTJOB

TOMC(I) - Total operating cost as for TCC(I) above

JEPA - Environmental Protection Agency Region number

WINCR - Increase in basic capital costs due to costs for engineering, legal, and administrative fees and some additional land costs. These values are associated with industrial types through the SIC codes

RI - Range of capital cost values to determine distribution of costs in the program

ROM - Range of O&M cost values for distribution analysis

ANAME - State name associated with a State number. This is only used when State summaries are presented

Output

IEPA - Environmental Protection Agency Region number

IWREG - Water use region number from the Census of Manufactures--Water Use in Manufacturing--modified (elsewhere defined)

BXAME - State name

ISIC - Standard Industrial Classification Code

XPLAMT - Number of industrial plants being analyzed in this output selection. The total is 14499

ER(I) - Manufacturing employment information based on summary of all manufacturing plants within certain selection criteria specified, i.e. State, EPA region, SIC code, etc.

I = 1 - maximum
I = 2 - minimum
I = 3 - average
I = 4 - total
I = 5 - standard deviation

QR(I) - Basic total treatable flow information on same basis as ER(I)

TCCR(I) - Total capital cost information for only structural costs. This is the cost transferred to the construction industry (on same basis as ER[I])

TOMCR(I) - Total annual operation and maintenance cost information on the same basis as ER(I). This does not include interest and capital replacement cost

TACR(I) - Total annual cost on the same basis as ER(I). This

includes annual O&M cost, interest, and replacement of capital

AC(I) - Annual cost totals broken down as follows:

I = 1 - operation and maintenance
I = 2 - capital replacement
I = 3 - interest charges
I = 4 - total

DOMC(I,J) - Annual operation and maintenance costs excluding interest and capital replacement distributed as requested in the input of ROM(J), J=1,5 i.e. for 5 levels of costs in descending order

I = 1 - maximum
I = 2 - minimum
I = 3 - average
I = 4 - total
I = 5 - standard deviation
I = 6 - number of plants falling into this cost range

DIR(I,J) - Distribution of investment requirements by industry including capital cost and non-structural costs. The distribution is as requested in RI(J), J=1,5 i.e. 5 levels of costs in descending order; and "I" as defined in DOMC(I,J)

PCC(I,J) and POMC(I,J) - Are respectively the capital and O&M treatment costs for individual treatment types (I=1,12), for all industry in the class under consideration

J = 1 - maximum
J = 2 - minimum
J = 3 - average
J = 4 - total
J = 5 - standard deviation

OUTPUT PROGRAM

CODING

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INDUSTRIAL REQUIREMENTS OUTPUT PROGRAM
(For EPA Regions)

```
// EXEC FORGCLGG,REGION=150K
//SOURCE.SYSIN DD DATA
C      THIS JOB IS TO DUMP THE INDUSTRIAL MODEL DATA IN SOME ORDERED ARRAYS
C
       DIMENSION TCC(15),TOMC(15),ANAME(57,6),BNAME(5)
       DIMENSION ER(6),QR(6),TCCR(6),TOMCR(6),TACR(6)
       DIMENSION DOMC(6,5),DIR(6,5),AC(4)
       DIMENSION POMC(6,12),PCC(6,12)
       DIMENSION ROM(5),RI(5),I2(1),I3(1),I4(1)
       COMMON WINCR(50,2)
       DATA ER,QR,TCCR,TOMCR,TACR,DOMC,DIR,PCC,POMC,AC,ROM,
      XRI/248*0.0/
C
C      I=1=MAX VALUE
C      I=2=MIN VALUE
C      I=3=AVERAGE VALUE
C      I=4=TOTAL VALUE
C      I=5=STANDARD DEVIATION
C      I=6=NUMBER IN SET OF DATA
C
C      INITIALIZE VALUES
       NPLANT=0
       IEND=0
       IFILL =9999
       NTRT=12
       NUMBER=0
       NUMCK=0
       READ(5,1000) RI
       READ(5,1000) ROM
 1000 FORMAT(5F10.0)
C
C
       DO 2 I=1,57
     2 READ(15,1001) (ANAME(I,J),J=1,6)
 1001 FORMAT(F10.0,5A4)
 1030 FORMAT(37A4)
     1 READ(40,1030) JST,JSIC,JWREG,JSMSA,EMP,CQT,
      X(TCC(I),I=1,15),(TOMC(I),I=1,15),JEPA
       IF(EMP.EQ.0.0) GO TO 1
C      JSIC=JSIC/SOME VALUE SUCH AS 10...100
       JSIC=JSIC/100
     3 CONTINUE
       IST=JST
       ISIC=JSIC
       IWREG=JWREG
       ISMSA=JSMSA
       IEPA=JEPA
       NPLANT=1
       TC=0.0
       TOM=0.0
       SIC=ISIC
```

```
      SIC2=(ISIC/100)*100
      IF(IFILL.EQ.9999) GO TO 300
    4 CALL LG2S(SIC,I2,I3,I4,IFILL,SIC2)
      IF(IFILL.EQ.9999) GO TO 520
      IF(IFILL.EQ.500) IFILL=0
      CALL LG3S(SIC,I2,I3,I4,IFILL,SIC2)
      IF(IFILL.EQ.9999) GO TO 300
      CALL LG4S (SIC,I2,I3,I4,IFILL,SIC2)
      IF(IFILL.EQ.9999) GO TO 300
      I1=I4(1)
      CSTINC=WINCR(I1,2)
C
      DO 66 K=1,5
      DOMC(2,K)=1.0E20
      DIR(2,K)=1.0E20
   66 CONTINUE
      DO 5 I=1,NTRT
      TC=TC+TCC(I)
    5 TOM=TOM+TOMC(I)
      TIC=TC*CSTINC
      PC=TC*0.127+TOM
      DO 6 I=1,4
      ER(I)=EMP
      QR(I)=CQT
      TCCR(I)=TC
      TOMCR(I)=TOM
    6 TACR(I)=PC
      ER(5)=EMP*EMP
      QR(5)=CQT*CQT
      TCCR(5)=TC*TC
      TOMCR(5)=TOM*TOM
      TACR(5)=PC*PC
C
C     DISTRIBUTION BEGINNING
      IF(TOM.LE.ROM(1)) GO TO 7
      K=1
      GO TO 9
    7 DO 8 I=1,4
      J=I
      K=I+1
      IF(TOM.GT.ROM(K)) GO TO 9
    8 CONTINUE
C     CAN'T GET HERE WITHOUT ERROR
      GO TO 500
    9 DO 10 I=1,4
   10 DOMC(I,K)=TOM
      DOMC(5,K)=TOM*TOM
      DOMC(6,K)=1.0
C
      IF(TIC.LE.RI(1)) GO TO 11
      K=1
      GO TO 13
   11 DO 12 I=1,4
      J=I
      K=I+1
      IF(TIC.GT.RI(K)) GO TO 13
   12 CONTINUE
C     CAN'T GET HERE WITHOUT ERROR
      GO TO 500
   13 DO 14 I=1,4
```

```
   14 DIR(I,K)=TIC
      DIR(5,K)=TIC*TIC
      DIR(6,K)=1.0
C
      DO 17 J=1,NTRT
      DO 15 I=1,4
      PCC(I,J)=TCC(J)
   15 POMC(I,J)=TOMC(J)
      PCC(5,J)=TCC(J)*TCC(J)
      POMC(5,J)=TOMC(J)*TOMC(J)
      IF(TCC(J).LE.0.00005) GO TO 16
      PCC(6,J)=1.0
   16 CONTINUE
      IF(TOMC(J).LE.0.00005) GO TO 17
      POMC(6,J)=1.0
   17 CONTINUE
C
   18 READ(40,1030,END=400) JST,JSIC,JWREG,JSMSA,EMP,CQT,
     X(TCC(I),I=1,15),(TOMC(I),I=1,15),JEPA
C     JSIC=JSIC/SOME VALUE... 10...  100
      JSIC=JSIC/100
C     DISCRIMINATORS ARE  USED HERE
      IF(IEPA-JEPA) 100,20,500
C 220 IF(ISIC-JSIC) 100,20,500
C     CAN ADD STATE DISCRIMINATOR HERE
C     CAN ADD WATER USE DISCRIMINATOR HERE
C     CAN ADD SMSA DISCRIMINATOR HERE
C
   20 CONTINUE
      IF(EMP.EQ.0.0) GO TO 18
      TC=0.0
      TOM=0.0
      DO 21 I=1,NTRT
      TC=TC+TCC(I)
   21 TOM=TOM+TOMC(I)
      TIC=TC*CSTINC
      PC=TC*0.127+TOM
      ISIC=JSIC
      NPLANT=NPLANT+1
      ER(1)=AMAX1(EMP,ER(1))
      QR(1)=AMAX1(CQT,QR(1))
      TCCR(1)=AMAX1(TC,TCCR(1))
      TOMCR(1)=AMAX1(TOM,TOMCR(1))
      TACR(1)=AMAX1(PC,TACR(1))
C
      ER(2)=AMIN1(EMP,ER(2))
      QR(2)=AMIN1(CQT,QR(2))
      TCCR(2)=AMIN1(TC,TCCR(2))
      TOMCR(2)=AMIN1(TOM,TOMCR(2))
      TACR(2)=AMIN1(PC,TACR(2))
C
      DO 25 I=3,4
      ER(I)=ER(I)+EMP
      QR(I)=QR(I)+CQT
      TCCR(I)=TCCR(I)+TC
      TOMCR(I)=TOMCR(I)+TOM
   25 TACR(I)=TACR(I)+PC
C
      ER(5)=ER(5)+EMP*EMP
      QR(5)=QR(5)+CQT*CQT
```

```
      TCCR(5)=TCCR(5)+TC*TC
      TOMCR(5)=TOMCR(5)+TOM*TOM
      TACR(5)=TACR(5)+PC*PC
C
   30 CONTINUE
      IF(TOM.LE.ROM(1)) GO TO 31
      K=1
      GO TO 35
   31 DO 32 I=1,4
      J=I
      K=I+1
      IF(TOM.GE.ROM(K)) GO TO 35
   32 CONTINUE
C     CAN'T GET HERE WITHOUT AN ERROR
      GO TO 500
   35 DOMC(1,K)=AMAX1(DOMC(1,K),TOM)
      DOMC(2,K)=AMIN1(DOMC(2,K),TOM)
      DO 36 I=3,4
   36 DOMC(I,K)=DOMC(I,K)+TOM
      DOMC(5,K)=DOMC(5,K)+TOM*TOM
      DOMC(6,K)=DOMC(6,K)+1.0
C
   40 CONTINUE
      IF(TIC.LE.RI(1)) GO TO 41
      K=1
      GO TO 45
   41 DO 42 I=1,4
      J=I
      K=I+1
      IF(TIC.GE.RI(K)) GO TO 45
   42 CONTINUE
C      CAN'T GET HERE WITHOUT ERROR
      GO TO 500
   45 DIR(1,K)=AMAX1(DIR(1,K),TIC)
      DIR(2,K)=AMIN1(DIR(2,K),TIC)
      DO 46 I=3,4
      DIR(I,K)=DIR(I,K)+TIC
   46 CONTINUE
      DIR(5,K)=DIR(5,K)+TIC*TIC
      DIR(6,K)=DIR(6,K)+1.0
C
      DO 60 J=1,NTRT
      PCC(1,J)=AMAX1(PCC(1,J),TCC(J))
      IF(TCC(J).LT.0.0005) GO TO 50
      PCC(2,J)=AMIN1(PCC(2,J),TCC(J))
   50 CONTINUE
      PCC(3,J)=PCC(3,J)+TCC(J)
      PCC(4,J)=PCC(4,J)+TCC(J)
      PCC(5,J)=PCC(5,J)+TCC(J)*TCC(J)
      IF(TCC(J).LT.0.0005) GO TO 51
      PCC(6,J)=PCC(6,J)+1.0
   51 CONTINUE
      POMC(1,J)=AMAX1(POMC(1,J),TOMC(J))
      IF(TOMC(J).LT.0.0005) GO TO 52
      POMC(2,J)=AMIN1(POMC(2,J),TOMC(J))
   52 CONTINUE
      POMC(3,J)=POMC(3,J)+TOMC(J)
      POMC(4,J)=POMC(4,J)+TOMC(J)
      POMC(5,J)=POMC(5,J)+TOMC(J)*TOMC(J)
      IF(TOMC(J).LT.0.0005) GO TO 53
```

```
      POMC(6,J)=POMC(6,J)+1.0
   53 CONTINUE
   60 CONTINUE
C     THIS ENDS ALL CALCULATIONS BUT THE ANNUAL COSTS BY O&M,REPLACE, INT.
C     WRITE(6,1775) JSIC
C1775 FORMAT('  NEW RECORD',I8)
      GO TO 18
  100 CONTINUE
C     THIS PART OF ROUTINE WRITES OUT TOTALS AND SENDS CONTROL BACK
C     TO  INITIALIZATION OF MATRICIES.....(STATEMENT..3)
C
      AC(1)=TOMCR(4)
      AC(2)=TCCR(4)*0.05
      AC(3)=TCCR(4)*0.077
      AC(4)=0.0
      DO 101 I=1,3
  101 AC(4)=AC(4)+AC(I)
C
      ER(6)=NPLANT
      QR(6)=NPLANT
      TCCR(6)=NPLANT
      TOMCR(6)=NPLANT
      TACR(6)=NPLANT
C
C     THIS WRITE STATEMENT FOR EACH INDUSTRU DEFINES OUTPUT FOR
C       SUMMARIZATION AT A LATER TIME IF NECESSARY..FO  ANY OTHER SET
C
C     WRITE(25,8000) ISIC,ER,QR,TCCR,TOMCR,TACR,DOMC,DIR,PCC,
C    XPOMC,AC
C
C8000 FORMAT(227A4)
C
C     CALCULATE AVERAGE VALUES HERE
C
      ER(3)=ER(3)/ER(6)
      QR(3)=QR(3)/QR(6)
      TCCR(3)=TCCR(3)/TCCR(6)
      TOMCR(3)=TOMCR(3)/TOMCR(6)
      TACR(3)=TACR(3)/TACR(6)
      DO 110 J=1,5
      IF(DIR(6,J).LE.0.0) GO TO 103
      DIR(3,J)=DIR(3,J)/DIR(6,J)
      GO TO 104
  103 DIR(3,J)=0.0
  104 IF(DOMC(6,J).LE.0.0) GO TO 106
      DOMC(3,J)=DOMC(3,J)/DOMC(6,J)
      GO TO 107
  106 DOMC(3,J)=0.0
  107 CONTINUE
  110 CONTINUE
      DO 120 J=1,NTRT
      IF(PCC(6,J).LE.0.0) GO TO 113
      PCC(3,J)=PCC(3,J)/PCC(6,J)
      GO TO 114
  113 PCC(3,J)=0.0
  114 IF(POMC(6,J).LE.0.0) GO TO 116
      POMC(3,J)=POMC(3,J)/POMC(6,J)
      GO TO 117
  116 POMC(3,J)=0.0
  117 CONTINUE
```

```
  120 CONTINUE
C
C     CALCULATE STANDARD DEVIATIONS BEGINNING HERE...
C
      A=ER(5)
      B=ER(4)
      C=ER(6)
      ER(5)=SD(A,B,C)
C
      A=QR(5)
      B=QR(4)
      C=QR(6)
      QR(5)=SD(A,B,C)
C
      A=TCCR(5)
      B=TCCR(4)
      C=TCCR(6)
      TCCR(5)=SD(A,B,C)
C
      A=TOMCR(5)
      B=TOMCR(4)
      C=TOMCR(6)
      TOMCR(5)=SD(A,B,C)
C
      A=TACR(5)
      B=TACR(4)
      C=TACR(6)
      TACR(5)=SD(A,B,C)
C
      DO 130 J=1,5
C
      A=DIR(5,J)
      B=DIR(4,J)
      C=DIR(6,J)
      DIR(5,J)=SD(A,B,C)
C
      A=DOMC(5,J)
      B=DOMC(4,J)
      C=DOMC(6,J)
      DOMC(5,J)=SD(A,B,C)
C
  130 CONTINUE
      DO 140 J=1,NTRT
C
      A=PCC(5,J)
      B=PCC(4,J)
      C=PCC(6,J)
      PCC(5,J)=SD(A,B,C)
C
      A=POMC(5,J)
      B=POMC(4,J)
      C=POMC(6,J)
      POMC(5,J)=SD(A,B,C)
C
  140 CONTINUE
C     NUMCK=NUMCK+1
C     IF(NUMCK.GT.5) GO TO 600
      DO 141 I=1,5
      DO 141 J=1,NTRT
      PCC(I,J)=PCC(I,J)/1000.
```

```
      POMC(I,J)=POMC(I,J)/1000.
  141 CONTINUE
C
      DO 142 J=1,5
      IF(DIR(2,J).EQ.1.0E20) DIR(2,J)=0.0
      IF(DOMC(2,J).EQ.1.0E20) DOMC(2,J)=0.0
  142 CONTINUE
C
C     FIND CORRECT STATE NAME...
C
      G=IST
      DO 143 I=1,57
      K=I
      IF(G.EQ.ANAME(I,1)) GO TO 144
  143 CONTINUE
      GO TO 500
  144 CONTINUE
C     DO 145 I=1,5
C     L=I+1
C     BNAME(I)=ANAME(K,L)
  145 CONTINUE
C     WRITE OUTPUT TO PAPER HERE....
      WRITE(6,2014) IEPA
C     WRITE(6,2012) IWREG
C     WRITE(6,2011) BNAME
C     WRITE(6,2000)
      WRITE(6,2038)
      WRITE(6,2007)
C     WRITE(6,2008) ISIC
      WRITE(6,2009) NPLANT
      WRITE(6,2001)
      WRITE(6,2002) (ER(I),I=1,5)
      WRITE(6,2003) (QR(I),I=1,5)
      WRITE(6,2004) (TCCR(I),I=1,5)
      WRITE(6,2005) (TOMCR(I),I=1,5)
      WRITE(6,2006) (TACR(I),I=1,5)
      WRITE(6,2010)(AC(I),I=1,4)
      WRITE(6,2020)
      WRITE(6,2021) ROM(1),(DOMC(I,1),I=1,6),
     X((ROM(J),ROM(J-1),(DOMC(I,J),I=1,6)),J=2,5)
C
      WRITE(6,2030)
      WRITE(6,2021) RI(1),(DIR(I,1),I=1,6),
     X((RI(J),RI(J-1),(DIR(I,J),I=1,6)),J=2,5)
C     WRITE STATEMENTS 2041 AND 2042 ARE SET UP FOR 12 TREATMENT PROCESSES
      WRITE(6,2040)
      WRITE(6,2041)
      WRITE(6,2042) ((PCC(I,J),J=1,NTRT),I=1,5)
C
C
      WRITE(6,2050)
      WRITE(6,2041)
      WRITE(6,2042) ((POMC(I,J),J=1,NTRT),I=1,5)
C
      WRITE(6,2060)
C
      DO 150 I=1,6
      DO 150 J=1,NTRT
      POMC(I,J)=0.0
      PCC(I,J)=0.0
```

```
  150 CONTINUE
      DO 151 I=1,6
      DO 151 J=1,5
      DIR(I,J)=0.0
      DOMC(I,J)=0.0
  151 CONTINUE
C
C     FORMATS FOR WRITEOUT FOLLOW....
C
 2000 FORMAT(1H1,T60,'NATIONAL TOTALS')
 2038 FORMAT(T41,'FLOW OF LEAST EFFICIENT WATER USE REGION MODIFIED')
C
C
 2012 FORMAT(1H1,T56,'WATER USE REGION ',I3)
 2014 FORMAT(1H1,T58,'EPA REGION ',I5)
 2007 FORMAT(T47,'1968 FLOW CONDITIONS ( 1967 DOLLARS)')
C
 2011 FORMAT(1H1,T55,5A4)
C
 2008 FORMAT(T5,'SIC CODE...',I6)
 2009 FORMAT(T5,'TOTAL NUMBER OF MANUFACTURING PLANTS...',I6,//)
 2001 FORMAT(T34,'MAXIMUM',T54,'MINIMUM',T74,'AVERAGE',
     XT96,'TOTAL',T118,'S.D.')
 2002 FORMAT(T5,'MANUFACTURING EMPLOYMENT ',5(F15.0,5X))
 2003 FORMAT(T5,'FLOW (MGY)',15X,5(F15.0,5X))
 2004 FORMAT(T5,'TOTAL CAPITAL COST',7X,5(F15.0,5X))
 2005 FORMAT(T5,'TOTAL ANNUAL O&M COST',4X,5(F15.0,5X))
 2006 FORMAT(T5,'TOTAL ANNUAL COST',8X,5(F15.0,5X),//)
C
 2010 FORMAT(T48,'ANNUAL COST OF WASTE TREATMENT',/,
     XT38,'O&M',T53,'REPLACEMENT',T75,'INTEREST',T96,'TOTAL',//,
     X31X,4(F15.0,5X),//)
C
 2020 FORMAT(T42,'DISTRIBUTION OF OPERATION AND MAINTENANCE COST',
     X/,T5,'COST RANGE',T33,'MAXIMUM',T54,'MINIMUM',T74,
     X'AVERAGE',T96,'TOTAL',T118,'S.D.',T127,'NUMBER')
C
 2021 FORMAT(T5,'>',F9.0,T29,4(F15.0,5X),F15.0,2X,F6.0,/,
     X4(3X,F8.0,' TO ',F8.0,T29,4(F15.0,5X),F15.0,2X,F6.0,/))
C
 2030 FORMAT(T48,'DISTRIBUTION OF INVESTMENT REQUIREMENTS',/,
     XT5,'COST RANGE',T33,'MAXIMUM',T54,'MINIMUM',T74,
     X'AVERAGE',T96,'TOTAL',T118,'S.D.',T127,'NUMBER')
C
 2040 FORMAT(T35,'DISTRIBUTION OF TOTAL CAPITAL COST',
     X' FOR TREATMENT ($ 1000)',/)
 2041 FORMAT(T12,'*1*',T22,'*2*',T32,'*3*',T42,'*4*',T52,'*5*',
     XT62,'*6*',T72,'*7*',T82,'*8*',T92,'*9*',T102,'*10*',T112,
     X'*11*',T122,'*12*',/)
 2042 FORMAT(' MAX',T8,12(F8.0,2X),/,' MIN',T8,12(F8.0,2X),/,
     X' AVE',T8,12(F8.0,2X),/,' TOT',T8,12(F8.0,2X),/,
     X' SD ',T8,12(F8.0,2X),//)
C
 2050 FORMAT(T39,'DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS',
     X' ($ 1000)',/)
C
C
 2060 FORMAT(' SD  OR S.D.  REPRESENTS STANDARD DEVIATION.  ',
     X' THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.')
C
```

```
C
C
      IF(IEND.NE.0) GO TO 600
      GO TO 3
C
C     THIS PART OF PROGRAM PROVIDES FOR SETUP SUBROUTINE
C
  300 CALL LGSETS(SIC,IFILL)
      NUMBER=NUMBER+1
      IF(NUMBER.GT.5) GO TO 500
      GO TO 4
C
C     THIS PART OF PROGRAM GENERATES STOP
C
  400 CONTINUE
      IEND=100
      GO TO 100
  500 CONTINUE
      WRITE(6,5100)
 5100 FORMAT(' ABNORMAL JOB END         ')
      GO TO 600
  520 CONTINUE
      WRITE(6,5100) JSIC
 5200 FORMAT(' WINCR MATRIX DOES NOT CONTAINLG SIC CODE',I8)
C     GO TO 600
C
  600 CONTINUE
      STOP
      END
      FUNCTION SD(A,B,C)
C     A=SUM OF X(I) SQUARED
C     B=TOTAL SUM OF X(I)'S
C     C=NUMBER OF OBSERVATIONS
      IF(C.LE.1.0) GO TO 800
      D=ABS((A-(B*B)/C)/(C-1.0))
      IF(D.LE.0.0005) GO TO 800
      SD=SQRT(D)
      RETURN
  800 SD=0.0
      RETURN
      END
      SUBROUTINE LGSETS (SIC,IFILL)
      COMMON WINCR(50,2)
C
C     INITIALIZE MATRICIES
      DO 1 I=1,50
      DO 1 J=1,2
    1 WINCR(I,J)=9999.
C     BEGIN READING INTO MATRICIES
    3 N=18
      DO 50 M=1,1
      N=N+2
      GO TO 10
   10 IC=1
   11 READ(N,1900,END=50)(WINCR(IC,J),J=1,2)
      IF(WINCR(IC,1).LT.SIC) GO TO 11
C1010 FORMAT(2(2X,9(E10.3,2X),/))
 1000 FORMAT(1X,2E15.6)
C     WRITE(6,1000)  (WINCR(IC,J),J=1,2)
      IC=IC+1
```

```
      IF(IC.LT.49) GO TO 11
      GO TO 50
   50 CONTINUE
      IFILL=1
 1900 FORMAT(F4.0,1X,F10.0)
C
 1910 FORMAT(F4.0,6X,9F5.0,/,F4.0,6X,9F5.0)
C
 1920 FORMAT(F4.0,1X,17F5.0)
C
   51 CONTINUE
      DEBUG SUBCHK,SUBTRACE,UNIT(43)
      AT 3
      TRACE ON
      AT 51
      TRACE OFF
      REWIND 20
C     REWIND 14
C     REWIND 16
      RETURN
      END
      SUBROUTINE LG2S(SIC,I2,I3,I4,IFILL,SIC2)
      DIMENSION I2(1),I3(1),I4(1)
      COMMON WASTE(50,2)
  100 CONTINUE
      IF(IFILL.EQ.0) GO TO 2
      DO 1 I=1,1
      I2(I)=1
      I3(I)=1
    1 I4(I)=1
      IFILL=0
    2 CONTINUE
      ISIC=SIC
      SIC2=(ISIC/100)*100
C     I=1=WASTE=WINCR=INCREASED CAPITAL COST MATRIX...
      DO 19 I=1,1
      N=I2(I)
      GO TO 12
   12 T5=WASTE(N,1)
      IF(SIC2-WASTE(N,1)) 28,18,13
   13 N=N+1
      GO TO 12
   18 I2(I)=N
   19 CONTINUE
      GO TO 30
   28 IF(WASTE(N,1).EQ.9999.) GO TO 50
      IFILL=500
      RETURN
   30 DO 31 I=1,1
      I3(I)=I2(I)
   31 I4(I)=I2(I)
      RETURN
   50 IFILL=9999
   51 CONTINUE
      DEBUG SUBCHK,SUBTRACE,TRACE,INIT(IFILL,N,T5),UNIT(43)
      AT 100
      TRACE ON
      AT 51
      TRACE OFF
      RETURN
```

```
      END
      SUBROUTINE LG3S(SIC,I2,I3,I4,IFILL,SIC2)
      DIMENSION I2(1),I3(1),I4(1)
      COMMON WASTE(50,2)
C     I=1=WASTE=WINCR=INCREASE CAPITAL COST MATRIX
    1 ISIC=SIC
      SIC3=(ISIC/10)*10
    3 CONTINUE
      DO 30 I=1,1
      N=I3(I)
      GO TO 70
   70 IF(SIC3-WASTE(N,1)) 18,10,71
   71 N=N+1
      GO TO 70
   10 I3(I)=N
      GO TO 30
   18 IF(WASTE(N,1).EQ.9999.) GO TO 50
      GO TO 20
   20 I3(I)=I2(I)
      IF(I4(I)-I2(I)) 22,30,30
   22 I4(I)=I2(I)
   30 CONTINUE
      RETURN
   50 IFILL=9999
   51 CONTINUE
      SIC2=(ISIC/100)*100
      DEBUG SUBCHK,SUBTRACE,UNIT(43)
      AT 1
      TRACE ON
      AT 51
      TRACE OFF
      RETURN
      END
      SUBROUTINE LG4S (SIC,I2,I3,I4,IFILL,SIC2)
      DIMENSION I2(1),I3(1),I4(1)
      COMMON WASTE(50,2)
C     I=1=WASTE=WINCR=INCREASED CCAPITAL COST MATRIX
    1 ISIC=SIC
      SIC4=ISIC
      DO 30 I=1,1
      N=I4(I)
      GO TO 70
   70 IF(SIC4-WASTE(N,1)) 18,10,71
   71 N=N+1
      GO TO 70
   10 I4(I)=N
      GO TO 30
   18 IF(WASTE(N,1).EQ.9999.) GO TO 50
      GO TO 20
   20 I4(I)=I3(I)
   30 CONTINUE
      RETURN
   50 IFILL=9999
   51 CONTINUE
      SIC2=(ISIC/100)*100
      DEBUG SUBCHK,SUBTRACE,UNIT(43)
      AT 1
      TRACE ON
      AT 51
      TRACE OFF
```

```
      RETURN
      END
/*
//GO.FT05F001 DD DISP=SHR,DSN=          .WRANGE
//GO.FT15F001 DD DISP=SHR,DSN=          .WSTATE
//GO.FT20F001 DD DISP=SHR,DSN=          .COSTINCR
//GO.FT25F001 DD DUMMY
//GO.FT40F001 DD DISP=SHR,UNIT=2314,VOL=SER=
//   DSN=              .EPAR.PLANT
//GO.FT43F001 DD DUMMY
/*
```

DISCUSSION OF THE CAPITAL IN PLACE MODEL

Overview

This model is quite simplistic. The assumptions made are as follows:

- The data in the 1967 Census of Manufactures--Water Use in Manufacturing is representative of total usable industrial activity in water pollution abatement up to 1967.
- This industrial activity was effective in abating pollution to the extent that units built would retain their usefulness in an upgrading effort by industry where necessary.
- Industrial expenditures for this observed abatement activity could be measured in current dollar terms by using the generalized cost functions defined for the COSTJOB model which are based on waste flow.
- Average flow by unit process is representative of unit process cost for each industry type. (Note that distributional characteristics of waste stream flow is not available for existing facilities.)
- Geographical distribution of industrial waste treatment is such that national average cost factors are sufficiently representative for in place facilities. (Disclosure regulations preclude geographical breakdown of these industries by the Bureau of the Census.)
- Table 8A in the 1967 Census of Manufactures--Water Use in Manufacturing is used as follows to determine treatment cost functions to use:

Table 8A

Cost Function Name	Column Headings
coagulation-sedimentation	coagulation
neutralization	pH
flotation	flotation
sedimentation	primary settling minus coagulation
biological oxidation	trickling filters; activated sludge; digestion; ponds or lagoons
chlorination	chlorination

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Definition of Terms Used

CFT(I,J,K) - Cost coefficient

The cost function is of the form:

$$\text{Log}_{10}\,(\text{Cost}) = A + \log_{10}\,(\text{Flow})\,(B + C \times \log_{10}\,[\text{Flow}])$$

I = 1 = A; I = 2 = B; I = 3 = C

J = 1 to number of treatment processes used, maximum number of processes is 15
K = 1= capital cost; K = 2 = O&M cost

P(I) - Number of plants in each treatment process category

I = 1 = SIC code
I = 2 to 12 is for the 11 treatment processes which were available for consideration in this analysis
I = 2 = oil separation (not used)
I = 3 = equalization (not used)
I = 4 = coagulation-sedimentation (used)
I = 5 = neutralization (used)
I = 6 = flotation (used)
I = 7 = sedimentation (used)
I = 8 = aeration (not used)
I = 9 = biological oxidation (used)
I =10 = chlorination (used)
I =11 = evaporation (not used)
I =12 = enumeration (not used)

F(I) - Average flows associated with each treatment process . . . definition of "I" as for P(I). Variability of flow due to number of operating days per year are handled external to the program by accounting for this in the data entry. Operating days per year are used in the cost routine to determine total operation and maintenance costs

SF - Waste strength scale factor relative to municipal wastes of the form

SF = 0.4 + 0.6 x (waste strength relative to municipal waste) where SF is greater than or equal to 1.0

CC(I) - Capital cost associated with each treatment process "I" as defined in P(I)

CCX(I) - Total investment requirements, structural, and non-structural costs, "I" as for P(I)

OMC(I) - Operation and maintenance costs, "I" as for P(I)

Discussion

The program listing to follow was hastily coded. The logic should be sound in terms of the program producing the output consistent with the assumptions and the results required. However, the comment statements may not be consistent with the coding. The reader will have to sift through this as best he can. This program is hardly worth detailed documentation. It was produced solely to present intermediate results for the final segment of the model, the scheduling model.

CAPITAL IN PLACE COST MODEL

LISTING

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CAPITAL IN PLACE COST MODEL

L-S-T DATA SET ---> WCAPNOW <---

```
// EXEC FORGCLGG,REGION=180K
//SOURCE.SYSIN DD DATA
      DOUBLE PRECISION DQ,DSF,DDAY
      DOUBLE PRECISION DCOEF(3)
      DIMENSION I2(5), CC(12), OMC(12),
     XT3(3),CCX(12),CFT(3,16,2),I4(5),I3(5),P(12),F(12)
      COMMON A(50,16,2),TSM(50,16,2),DY(50,2),XPN(50,2),WASTE(50,2)
      READ(5,1093) NTRT,NSMSAC
 1093 FORMAT(2I2)
      IF(NTRT.EQ.0.OR.NTRT.GT.15) GO TO 500
      IF(NSMSAC.EQ.0) MS=1
      IF(NSMSAC.NE.0) MS=2
      NTRT=NTRT+1
 9000 CONTINUE
      NUM=0
C     READ IN COST FACTOR MATRICIES
C     INITIALIZE THEN READ IN PROCESS COST FUNCTION COEFFICIENTS
      DO 3 I=1,3
      DO 3 J=1,NTRT
      DO 3 K=1,2
    3 CFT(I,J,K)=0.0
    4 READ(11,1092,END=6) N,K,T3
      N=N+1
      DO 5 I=1,3
    5 CFT(I,N,K)=T3(I)
      WRITE(6,1501) (T3(I),I=1,3)
 1501 FORMAT('  CFT...',3E15.6)
      GO TO 4
 1092 FORMAT(I2,I1,37X,3F10.0)
    6 CONTINUE
      IFILL=0
      SIC=2000.
      ISIC=SIC
      SIC2=(ISIC/100)*100
      CALL SETUP (SIC2,IFILL,MS)
    7 READ(10,1000) P
    8 READ(12,1000) F
 1000 FORMAT(F4.0,1X,11F5.0)
   10 CONTINUE
      IF(P(1)-F(1))  12,16,8
   12 READ(10,1000) P
      GO TO 10
   16 CONTINUE
C     WRITE(6,1503) (P(I),I=1,12)
C     WRITE(6,1504) (F(I),I=1,12)
 1503 FORMAT('  P...',8E14.5,/,10X,4E14.5)
 1504 FORMAT('  F...',8E14.5,/,10X,4E14.5)
      SIC=P(1)
      ISIC=SIC
      SIC2=(ISIC/100)*100
      IF(IFILL.EQ.9999) GO TO 300
```

```
      CALL SUB2 (SIC,I2,I3,I4,IFILL,SIC2)
      IF(IFILL.EQ.9999) GO TO 300
      IF(IFILL.EQ.500) IFILL=0
      CALL SUB3 (SIC,I2,I3,I4,IFILL,SIC2)
      IF(IFILL.EQ.9999) GO TO 300
      CALL SUB4 (SIC,I2,I3,I4,IFILL,SIC2)
      IF(IFILL.EQ.9999) GO TO 300
      III=I4(3)
      IIII=I4(4)
      IIIII=I4(5)
      HS=WASTE(IIIII,2)
      CALL LGSCLW (HS,SF)
      II=I4(2)
      DDAY=DY(II,2)
C     WRITE(6,1500) (I4(K),K=3,5)
 1500 FORMAT('  I4 VALUES...',3I8)
      DO 30 I=2,12
      L=1
C     L HAD TO BE INITIALIZED BECAUSE BRANCHED INTO SECOND LOOP
      F(I)=F(I)*SF
      IF(F(I).LT.0.005)  GO TO 25
      DO 30 L=1,2
      Q=F(I)*TSM(III,I,L)
      IF(Q.LT.0.005.AND.L.EQ.2) GO TO 26
      IF(Q.LT.0.005.AND.L.EQ.1) GO TO 24
C
      DQ=Q
      DSF=SF
      MM=0
      DO 41 MN=1,3
      DCOEF(MN)=CFT(MN,I,L)
      IF(DCOEF(MN).EQ.0.0) MM=MM+1
   41 CONTINUE
C     IF ALL COST COEFICIENTS = 0  DON'T CALCULATE COSTS
      IF (MM.EQ.3) GO TO 491
      CALL LGCFN1 (DQ,DSF,DCOEF,DCOST,L,DDAY)
      COST=DCOST
      IF(L.EQ.2) GO TO 22
      CC(I)=COST*P(I)
      GO TO 23
   22 OMC(I)=COST*P(I)
   23 CONTINUE
      GO TO 30
  491 IF(L.EQ.1) GO TO 24
      GO TO 26
   24 CC(I)=0.0
      GO TO 30
   25 CONTINUE
      CC(I)=0.0
   26 OMC(I)=0.0
   30 CONTINUE
      CCX(1)=CC(1)
      DO 35 I=2,12
   35 CCX(I)=CC(I)*XPN(IIII,2)
      WRITE(6,2000)((P(I),I=1,12),(F(I),I=2,12),(CC(I),I=2,12),
     X(CCX(I),I=2,12),(OMC(I),I=2,12))
C
 2000 FORMAT(' SIC CODE...',F5.0,/,1X,'NUMBER OF PLANTS',/,1X,11F11.0,
     X/,'  AVERAGE FLOW  ',/,1X,11E11.3,/,'  TOTAL CAPITAL COST',
     X/,1X,11E11.3,/,'  TOTAL CAPITAL COST* BUILDING FACTOR ',/,
```

```
     X1X,11E11.3,/,'  TOTAL O&M COST  ',/,1X,11E11.3,///)
       GO TO 7
  300  NUM=NUM+1
       IF(NUM.GT.10) GO TO 480
       CALL SETUP (SIC,IFILL,MS)
       GO TO 16
  480  WRITE(6,4800)
 4800  FORMAT('  TOO MANY SETUP CALLS'//)
  500  CONTINUE
 9500  CONTINUE
C      DEBUG SUBCHK,INIT(SF,Q,COST,DDAY),UNIT(43)
C      AT 9000
C      TRACE ON
C      AT 9500
C      TRACE OFF
       STOP
       END
       SUBROUTINE SETUP (SIC,IFILL,MS)
       COMMON TM(50,16,2),TSM(50,16,2),WU(50,2),DAY(50,2),WASTE(50,2)
C
C      INITIALIZE MATRICIES
       DO 2 I=1,50
       DO 1 J=1,16
       DO 1 K=1,2
       TM(I,J,K)=9999.
     1 TSM(I,J,K)=9999.
       DO 2 J=1,2
     2 WU(I,J)=9999.
C      BEGIN READING INTO MATRICIES
       DO 5 I=1,50
       DO 5 J=1,2
       DAY(I,J)=9999.
     5 WASTE(I,J)=9999.
     3 N=20
       DO 50 M=2,5
       N=N+2
       GO TO (10,30,20,35,40),M
    10 IC=1
   101 DO 11 K=1,MS
    11 READ(N,1900,END=50) (TM(IC,J,K),J=1,16)
       IF(TM(IC,1,1).LT.SIC) GO TO 101
 1010 FORMAT(2(2X,9(E10.3,2X),/))
 1000 FORMAT (1X,10(E11.4,1X),/,1X,6(E11.4,1X))
C      DO 111 K=1,MS
C 111 WRITE(6,1000) ((TM(IC,J,K),J=1,16),K=1,MS)
       IC=IC+1
       IF(IC.LT.49) GO TO 101
       GO TO 50
    20 IC=1
    21 READ(N,1910,END=50) ((TSM(IC,J,K),J=1,16),K=1,2)
       IF(TSM(IC,1,1).LT.SIC) GO TO 21
C      WRITE(6,1000) ((TSM(IC,J,K),J=1,16),K=1,2)
C
       IC=IC+1
       IF(IC.LT.49) GO TO 21
       GO TO 50
    30 IC=1
C      THIS UNFORMATTED READ MUST CONFORM TO JOB"WUSEJOB" OUTPUT
    31 READ(N,1930,END=50) (WU(IC,J),J=1,2)
       IF(WU(IC,1).LT.SIC) GO TO 31
```

```
C      WRITE(6,1020) (WU(IC,J),J=1,2)
C
       IC=IC+1
       IF(IC.LT.49) GO TO 31
       GO TO 50
   35  IC=1
C      FORMAT 1930 DEFINES NUMBER OF WORKDAYS/YEAR FOR SUBROUTINE LGSCLQ
C        DATA SET NAME  B.V00005.WDAY
   36  READ(N,1930,END=50) (DAY(IC,J),J=1,2)
       IF(DAY(IC,1).LT.SIC) GO TO 36
C      WRITE(6,1020) (DAY(IC,J),J=1,2)
       IC=IC+1
       IF(IC.LT.49) GO TO 36
       GO TO 50
   40  IC=1
   41  READ(N,1930,END=50) (WASTE(IC,J),J=1,2)
       IF(WASTE(IC,1).LT.SIC) GO TO 41
C      WRITE(6,1020) (WASTE(IC,J),J=1,2)
       IC=IC+1
       IF(IC.LT.49) GO TO 41
       GO TO 50
C      FORMAT  1930  ALSO DEFINES INPUT FOR WASTE STRENGTH IN MG/L OF B.O.D.
 1930  FORMAT(F4.0,1X,F10.0)
 1020  FORMAT(1X,F5.0,5X,F10.2)
   50  CONTINUE
       IFILL=1
C      FORMAT 1910 DEFINES INPUT FOR TREATMENT TYPE & DECIMAL FLOW FACTORS
 1900  FORMAT(F4.0,1X,15F5.0)
C
C      FORMAT 1910 DEFINES INPUT FOR TREATMENT SCALE MATRIX NOW ALMOST
C        OBSOLETE.  VALUES SHOULD BE=1.0 EXCEPT FOR FINE TUNING.
 1910  FORMAT(F4.0,1X,15F5.0,/,F4.0,1X,15F5.0)
C
C      FORMAT 1920 HAS NO USE NOW EXCEPT FOR DEBUG... WAS USED FOR WATER USE
C          PER EMPLOYEE
 1920  FORMAT(F4.0,1X,17F5.0)
C
   51  CONTINUE
C      DEBUG SUBCHK,SUBTRACE,UNIT(47)
C      AT 3
C      TRACE ON
C      AT 51
C      TRACE OFF
C      REWIND 12
       REWIND 22
       REWIND 24
       REWIND 26
       REWIND 28
       RETURN
       END
       SUBROUTINE SUB2 (SIC,I2,I3,I4,IFILL,SIC2)
       DIMENSION I2(5),I3(5),I4(5)
       COMMON TM(50,16,2),TSM(50,16,2),WU(50,2),DAY(50,2),WASTE(50,2)
  100  CONTINUE
       IF(IFILL.EQ.0) GO TO 2
       DO 1 I=1,5
       I2(I)=1
       I3(I)=1
     1 I4(I)=1
       IFILL=0
```

```
    2 CONTINUE
C     DO 3 I=1,5
C     IF(I4(I).GT.I2(I)) I2(I)=I4(I)
C     IF(I3(I).GT.I2(I)) I2(I)=I3(I)
C   3 CONTINUE
      ISIC=SIC
      SIC2=(ISIC/100)*100
C     I=1=TM=TREATMENT MATRIX
C     I=2=WU=WATER USE MATRIX
C     I=3=TSM=TREATMENT SCALE MATRIX
C     I=4=DAY=DAYS WORKED/YR  MATRIX
C     I=5=WASTE=AVERAGE WASTE STRENGTH (MG/L)  BOD
      DO 19 I=2,5
      N=I2(I)
      GO TO (4,6,8,10,12),I
    4 T1=TM(N,1,1)
      IF(SIC2-TM(N,1,1)) 20,18,5
    5 N=N+1
      GO TO 4
    6 T2=WU(N,1)
      IF(SIC2-WU(N,1)) 22,18,7
    7 N=N+1
      GO TO 6
    8 T3=TSM(N,1,1)
      IF(SIC2-TSM(N,1,1)) 24,18,9
    9 N=N+1
      GO TO 8
   10 T4=DAY(N,1)
      IF(SIC2-DAY(N,1)) 26,18,11
   11 N=N+1
      GO TO 10
   12 T5=WASTE(N,1)
      IF(SIC2-WASTE(N,1)) 28,18,13
   13 N=N+1
      GO TO 12
   18 I2(I)=N
   19 CONTINUE
      GO TO 30
   20 IF(TM(N,1,1).EQ.9999.) GO TO 50
      IFILL=500
      RETURN
   22 IF(WU(N,1).EQ.9999.) GO TO 50
      IFILL=500
      RETURN
   24 IF(TSM(N,1,1).EQ.9999.) GO TO 50
      IFILL=500
      RETURN
   26 IF(DAY(N,1).EQ.9999.) GO TO 50
      IFILL=500
      RETURN
   28 IF(WASTE(N,1).EQ.9999.) GO TO 50
      IFILL=500
      RETURN
   30 DO 31 I=1,5
      I3(I)=I2(I)
   31 I4(I)=I2(I)
      RETURN
   50 IFILL=9999
   51 CONTINUE
C     DEBUG SUBCHK,SUBTRACE,UNIT(43)
```

```
C     AT 100
C     TRACE ON
C     AT 51
C     TRACE OFF
      RETURN
      END
      SUBROUTINE SUB3 (SIC,I2,I3,I4,IFILL,SIC2)
      DIMENSION I2(5),I3(5),I4(5)
      COMMON TM(50,16,2),TSM(50,16,2),WU(50,2),DAY(50,2),WASTE(50,2)
C     I=1=TM=TREATMENT MATRIX
C     I=2=WU=WATER USE MATRIX
C     I=3=TSM=TREATMENT SCALE MATRIX
C     I=4=DAY=DAYS WORKED/YEAR
C     I=5=WASTE=AVERAGE WASTE STRENGTH (MG/L)  BOD
    1 ISIC=SIC
      SIC3=(ISIC/10)*10
C     DO 3 I=1,5
C     IF(I4(I).GT.I3(I)) I3(I)=I4(I)
    3 CONTINUE
      DO 30 I=2,5
      N=I3(I)
      GO TO (4,6,8,68,70),I
    4 IF(SIC3-TM(N,1,1)) 12,10,5
    5 N=N+1
      GO TO 4
    6 IF(SIC3-WU(N,1)) 14,10,7
    7 N=N+1
      GO TO 6
    8 IF(SIC3-TSM(N,1,1)) 16,10,9
    9 N=N+1
      GO TO 8
   68 IF(SIC3-DAY(N,1)) 17,10,69
   69 N=N+1
      GO TO 68
   70 IF(SIC3-WASTE(N,1)) 18,10,71
   71 N=N+1
      GO TO 70
   10 I3(I)=N
      GO TO 30
   12 IF(TM(N,1,1).EQ.9999.) GO TO 50
      GO TO 20
   14 IF(WU(N,1).EQ.9999.) GO TO 50
      GO TO 20
   16 IF(TSM(N,1,1).EQ.9999.) GO TO 50
      GO TO 20
   17 IF(DAY(N,1).EQ.9999.) GO TO 50
      GO TO 20
   18 IF(WASTE(N,1).EQ.9999.) GO TO 50
      GO TO 20
   20 I3(I)=I2(I)
      IF(I4(I)-I2(I)) 22,30,30
   22 I4(I)=I2(I)
   30 CONTINUE
      RETURN
   50 IFILL=9999
   51 CONTINUE
      SIC2=(ISIC/100)*100
C     DEBUG SUBCHK,SUBTRACE,UNIT(43)
C     AT 1
C     TRACE ON
```

```
C     AT 51
C     TRACE OFF
      RETURN
      END
      SUBROUTINE SUB4 (SIC,I2,I3,I4,IFILL,SIC2)
      DIMENSION I2(5),I3(5),I4(5)
      COMMON TM(50,16,2),TSM(50,16,2),WU(50,2),DAY(50,2),WASTE(50,2)
C     I=1=TM=TREATMENT MATRIX
C     I=2=WU=WATER USE MATRIX
C     I=3=TSM=TREATMENT SCALE MATRIX
C     I=4=DAY=DAYS WORKED/YEAR
C     I=5=WASTE=AVERAGE WASTE STRENGTH (MG/L)  BOD
    1 ISIC=SIC
      SIC4=ISIC
      DO 30 I=2,5
      N=I4(I)
      GO TO (4,6,8,68,70),I
    4 IF(SIC4-TM(N,1,1)) 12,10,5
    5 N=N+1
      GO TO 4
    6 IF(SIC4-WU(N,1)) 14,10,7
    7 N=N+1
      GO TO 6
    8 IF(SIC4-TSM(N,1,1)) 16,10,9
    9 N=N+1
      GO TO 8
   68 IF(SIC4-DAY(N,1)) 17,10,69
   69 N=N+1
      GO TO 68
   70 IF(SIC4-WASTE(N,1)) 18,10,71
   71 N=N+1
      GO TO 70
   10 I4(I)=N
      GO TO 30
   12 IF(TM(N,1,1).EQ.9999.) GO TO 50
      GO TO 20
   14 IF(WU(N,1).EQ.9999.) GO TO 50
      GO TO 20
   16 IF(TSM(N,1,1).EQ.9999.) GO TO 50
      GO TO 20
   17 IF(DAY(N,1).EQ.9999.) GO TO 50
      GO TO 20
   18 IF(WASTE(N,1).EQ.9999.) GO TO 50
      GO TO 20
   20 I4(I)=I3(I)
   30 CONTINUE
      RETURN
   50 IFILL=9999
   51 CONTINUE
      SIC2=(ISIC/100)*100
C     DEBUG SUBCHK,SUBTRACE,UNIT(43)
C     AT 1
C     TRACE ON
C     AT 51
C     TRACE OFF
      RETURN
      END
      SUBROUTINE LGCFN1(DQ,DSF,DCOEF,DCOST,L,DDAY)
      DOUBLE PRECISION DQ,DSF,DCOEF(3),DCOST,DA,DB,DC,DQC,DQD,DDAY
    1 DA=DCOEF(1)
```

```
      DB=DCOEF(2)
      DC=DCOEF(3)
C     COST FUNCTION IS OF THE BASIC FORM :
C      DLOG10(COST)=DA+(DB+DC*DLOG10(DQD))*DLOG10(DQD)
C
C     CAPITAL COST BASED ON MGD  AND REPRESENTS TOTAL COST IN DOLLARS
C
C     O&M COST BASED ON MGD  AND REPRESENTS COSTS IN CENTS
C
C     PER  1000 GALLONS OF WASTE TREATED
C
C     CAPITAL COST FLOW  DQD=DQC/350  OPERATING DAYS PER YEAR
C
C     O&M  COST FLOW  DQD=DQC/350  OPERATING DAYS PER YEAR
C
C     CAPITAL COSTS WILL COME OUT IN DOLLARS FROM DCOST
C
C     O&M  COSTS WILL HAVE TO BE MULTIPLIED BY (DQC*1000) TO GET TOTAL
C        CENTS.....THEN DIVIDED BY 100 TO GET DOLLAR VALUES.
C          I.E.  SAME AS (DQC*10)*DCOST
C
      DQD=DQ*DSF
      IF(DQD.LT.0.0005) GO TO 75
C     DQD=DQC/350.
      IF(DC.LE.0.0) GO TO 20
      DCOST=DA+(DLOG10(DQD))*(DB+(DC*DLOG10(DQD)))
      GO TO 50
   20 DCOST=DA+DB*DLOG10(DQD)
   50 DCOST=DEXP(DCOST*2.3025851)
      GO TO (90,70),L
C       IF  L=1...CAPITAL COST  :   L=2 ... O&M COST
   70 DCOST=DCOST*(DQD*10.)*DDAY
      GO TO 90
   75 DCOST=0.0
   90 CONTINUE
   91 CONTINUE
C     DEBUG SUBCHK,SUBTRACE,UNIT(43)
C     AT 1
C     TRACE ON
C     AT 91
C     TRACE OFF
      RETURN
      END
/*
//GO.FT05F001 DD DISP=SHR,DSN=          .WCARD1
//GO.FT10F001 DD DISP=SHR,DSN=          .WGPLANTS
//GO.FT11F001 DD DISP=SHR,DSN=          .WCSTABC
//GO.FT12F001 DD DISP=SHR,DSN=          .WGFLOWS
//GO.FT22F001 DD DISP=SHR,DSN=          .WDAY
//GO.FT24F001 DD DISP=SHR,DSN=          .WTSM2
//GO.FT26F001 DD DISP=SHR,DSN=          .COSTINCR
//GO.FT28F001 DD DISP=SHR,DSN=          .WWASTE
//GO.FT43F001 DD DUMMY
//GO.FT47F001 DD DUMMY
/*
```

MODELING TO DEFINE THE COST OF ALTERNATIVES AVAILABLE FOR INDUSTRIAL WASTE WATER MANAGEMENT

Introduction

Such a title to a section is extremely brash and seemingly naive, given the complexity of industry and the possibilities available to manage waste waters as part of a product stream or as an end product of production. This section in reality tried to identify a range of costs open to industry of certain water-saving assumptions without attempting to alter the end-of-line treatment assumptions inherent in the basic analysis.

Central to the discussion of all of the analyses to follow is the Water Use Per Employee Model already described, and the Industrial Requirements Cost Model which calculates total required industrial expenditures using waste flow as the basis for costs and assuming as capital in place. The question that could be posed is "what would be the impact on these costs if industry were to reduce its demand for water based on what appears possible in other areas of the nation"?

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Basic Analysis

This analysis used "observed" water use per employee regionally defined from the 1968 Census of Manufactures--Water Use in Manufacturing as the basis of flow estimation from each industry in the analysis and based cost estimates on these values.

Least Efficient Reduced

The "Basic" analysis was modified using the following rationale. The least efficient (in water use per employee) industry group for any specific SIC code in its respective water use region should at least be able to make marginal improvements in water use up to the second highest water using industry group in the same SIC code in its respective water use region. In Matrix notation the logic would assume this form:

$$WU(I,J)$$

I = SIC code
J = Water Use Region 1-17

for any I = i
find maximum WU(i,J) J = 1,2,.....,17
J max = region in which maximum water use/employee occurs for industry "i"

now find Maximum WU(i,J) J = 1,2,.....,17
$J \neq J$ max
J second max = region in which second highest water use/employee occurs for industry "i"

set WU(i,J max) = WU(i,J second max)

and proceed in this manner for all industry groups I

As mentioned in the text, this is not as stringent an assumption as it might at first appear. In each water use region there is a cross section of industrial products produced within any of the four-digit SIC codes and within each of these same groups there is a cross section of ages of these industries.

There is the unexplored situation that may have occurred in the industrial development of this nation that in certain narrow industrial groupings development of an industry to serve the domestic and foreign needs of the whole nation occurred early and in a short-time frame using a technology that was advanced for its time. This type of development could have precluded significant competition from other sectors of the nation because of a symbiotic-like relationship with other supporting industries in the area being able to maintain a quasi-monopolistic advantage in its production and sales well past the point of its seeming technologic competitiveness.

Over expansion of production facilities during "boom times" may also have precluded modernization due to what would be considered normal expansion over time even within a geographic sector.

This situation, if occurring in certain narrow industrial groupings, could account for localized economic hardships because of modernization of methods by foreign competition and adaptation of these modern methods by other geographic sectors of the nation where the current economic situation is favorable to new growth in this set of industrial groupings. It should be anticipated that where a situation like this occurs, industrial development will not only take up the differential of current production capabilities of the old producing area, but will in fact develop its own sumbiotic-like structure and produce at lower cost those goods required to satisfy demand.

For these isolated situations where economic devleopment occurred early and at basically a single segment of time and also dominated the industry for a long time, this ability to adapt to more water-saving methods may not be as feasible as other, more healthy situations. These same "early bloomers" will wither on the economic vine and present an economic hardship to the area where they occur. Only massive reinvestment by industry in that same area would preclude such hardships; but that massive investment would have occurred in the area any way of other economic factors were favorable, so the likelihood of a rebirth of activity in these areas is small.

Philosophically this presents the same dilemma to the economist faced with the task of easing these hardships as that experienced in the medical profession: Do we have the moral right to prolong the suffering of a dying man against his will by subjecting him to the pain and indignities of measures to maintain life without curing the malady, and expending resources to do this rather than expending them on those who wish a cure and who can be cured? In the same sense, the economist's aid to dying industrial types in an area may be subjecting the people of the area to the same types of indignities by continuing to foster a look to the past with its apparent safety; its known structure; its potentially repressive tendencies to innovation, change, and growth; its essentially analogous expenditures on the dying and incurable; rather than promoting those activities of potential growth by either a laissez-faire policy (at worst) to the area or by active participation in healthy development by transfer of resources to accomplish this.

These same economic decisions shape the objectives and more strongly the accomplishments of an environmental protection program. In those same certain narrow industrial groupings, those economic policies that allow some measure of short-term continued competitiveness of an area require one of two compensating policies. Either environmental standards will be abrogated because of inability to finance pollution control techniques (either structural or process change) because of the short-term nature of expected continued operation, or federal financial arrangements with local communities will be undertaken for joint municipal-industrial waste

treatment facilities to abate pollution. This latter arrangement will result in large federal-local expenditures for facilities with relatively long design lines in relation to the industries they are designed to principally serve. Arrangements made now to accomplish these short-term objectives may well be operational facilities after the industry has gone out of business.

This analysis, of the Least Efficient Industry group--regionally determined--reduced to the next least efficient region, does not look at any of the structural or non-structural costs outlined in this section for these certain narrow industrial groupings except for changing flow and its resultant structural cost changes. While these ogher factors may be significant in certain areas and certain industrial groups, the overall analytical method should produce the measure of economic effect due to changing water use policies by industry as a substitution for purely structural change in terms of waste treatment.

Median Efficiency At Worst

This analysis is identical to the "Least Efficient Reduced" except the WU(I,J) defines all J values for water use regions with water use greater than the median region in any industry "i" at the median region value. This again is not as radical as it would initially appear because of the variability in industry in any region. It would, however, represent some more significant in-plant modifications than in getting to the "Least Efficient Reduced" condition. However, the marginal changes are in many cases lower in going from the Least Efficient Reduced to Median than from the Least Efficient to Least Efficient Reduced condition--in a water use per employee sense not in a total water use for all industry sense.

At Least As Good As Most Efficient One-Third

This analysis is basically the same as those already described with the level of water use/employee further reduced. This type analysis becomes more tenuous the further from current practice the analysis becomes. The basic value of this is to give a range of alternative costs for abatement, recognizing that all costs derived are based on high capital cost solutions to begin with. It is only in this latter context that this analysis would be meaningful.

All Operating At Most Efficient Current Level

This result would only occur under a no discharge situation, where high substitutions of capital for water would be required to meet discharge requirements. In this situation, the costs for pollution abatement could not be measured in the context of this model as currently structured. Whole new operating rules for industry would be necessary; environmental considerations not a part of this analysis would have to be added.

The framework of the model under all of the above conditions of water use/employee assumed the same waste segregation strategies and the same relative waste strengths would pass through each unit process for each case. The only variable was the total flow through each unit. In one sense, such process changes as counter-current flow and generally higher awareness of water use in processing will tend to increase waste concentrations; the same awareness of water use in processing could remove water entirely from some segments of the process stream as its "free good" stature is increasingly questioned. To what degree these factors counterbalance one another is not known. The assumption made is that they totally counterbalance one another.

FUTURE ANALYSES THAT APPEAR PROMISING IN THE CONTEXT OF THIS MODEL

Sludge Handling

This segment of waste water treatment was not considered in this cost analysis. It represents a high unit cost item, and potentially an important solid waste and air pollution problem. The data was not available to do a rigorous analysis. Hopefully, this deficiency can be corrected.

SMSA Vs. Non-SMSA Handling of Waste Water Treatment

This analysis should represent only a minor cost difference to industry in the context of the philosophy used in the initial model (definition of high cost solutions). However, it could be more significant in defining more realistic abatement measures industry would be likely to take due to ability to pre-treat and go to municipal systems as appropriate or use less capital intensive land disposal techniques where possible.

Varying Waste Treatment Requirements to Account for Lack of Water in Which to Discharge Wastes

With more specificity of location of industry and some added work (some has begun) to define those areas of high water availability varying levels of treatment could be defined to put the analysis closer to the environmental rather than regulatory context. This work (hopefully) may well be unnecessary with the data and decisions to come from the Refuse Act Permit Program.

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PART II

BASIC DATA AND RESULTS
INDUSTRIAL FACILITIES EVALUATION MODEL

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INTRODUCTION

The format for many of the tables presented in this section is uniform. Therefore, all general explanatory material and definitions are presented below.

Explanation of "Manufacturers" as Used in the Analysis

For each SIC (Standard Industrial Classification) group, the 1963 Census of Manufacturers enumerated establishments using 10 million gallons or more of water per year. An equal number of the manufacturers in each SIC group was chosen from Dun and Bradstreet File on the basis of employment, under the assumption that the most significant employers of labor in any industry were likely to also be the most significant users of water.

Explanation of Table Format

Maximum and minimum values refer to individual plants and total, average, and standard deviation values refer to all plants in the data set under consideration:

I. Definitions

1. Manufacturing employment is the number of persons employed at manufacturing plants in the data set studied.

2. Flow (mgy) indicates the flow of process water (including recycled cooling water and sanitary wastes) used in manufacturing plants in millions of gallons per year.

3. Total Capital Cost is the cost of installing waste treatment facilities for manufacturing in the data set studied.

4. Total Annual O&M Cost is the annual cost of operating and maintaining waste treatment operations.

5. Total Annual Cost is the sum of total annual O&M cost, interest on capital, and replacement cost (5 percent of total capital).

II. Distribution of Operation and Maintenance Cost

Annual operation and maintenance costs for treatment operations distributed into 5 cost range groups. The number of plants in each group is shown at the end of each line. Cost ranges indicate cost per plant for O&M.

III. Distribution of Investment Requirements

Investment requirements for waste treatment for all manufacturers

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are distributed into 5 cost range groups. The number of plants in the group are shown at the end of each line. Cost ranges indicate per plant capital requirements.

IV. Distribution of Total Capital Cost for Treatment ($1000)

Investment requirements are distributed among eleven different waste treatment processes, identified by code numbers one to eleven:

1. Oil separation
2. Equalization
3. Coagulation
4. Neutralization
5. Flotation
6. Sedimentation
7. Aeration
8. Biological Stabilization[1]
9. Chlorination
10. Evaporation
11. Incineration

V. Distribution of Annual O&M Costs ($1000)

Annual operation and maintenance costs are shown for the same eleven treatment processes found in the previous data group.

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[1]Conventional activated sludge in petroleum and petrochemicals Industries, aerated lagoon in all others.

National Summary for Manufacturing

The national tables summarize data from all SIC codes and cover all manufacturers in the contiguous States who are considered to use 10 million or more gallons of water per year. The set consists of five tables all similar in makeup but different in that costs were calculated using different industrial water use per employee data.

Often overlooked in the treatment of industrial wastes are unnecessary overuse and leakages in a plant's operation that add to the cost of waste treatment. When these are eliminated, a substantial reduction in water use and treatment costs may result. These tables hypothesize the reduction in costs that could result if manufacturers made better use of their water resources.

The first table used basic industrial water use per employee data as reported by the Census of Manufactures for the year 1968. The waste treatment costs are calculated on the basis that there be no change in water use practices as a result of waste treatment.

The second table used altered industrial water use per employee data to calculate costs. For each SIC group, the highest (least efficient) regional unit water use value was converted to equal the second highest regional value. The waste treatment costs calculated reflect change that would occur if the least efficient water users in each SIC group would lower their water use to the level of the immediately preceding region in terms of efficiency.

The third table presents calculated waste treatment costs on the basis of median efficiency for each SIC group. All regional values higher than this median were made equal to it. The resulting costs show change that would occur if all regional water users presently exceedingly the median value were to decrease water use per employee to the median value for each SIC code.

The fourth table presents costs calculated on the basis that for each SIC code all regional unit water use values that exceeded the most efficient third were made equal to the value of the least efficient region in the most efficient third.

The fifth table presents costs calculated using the most efficient regional unit water use value in each SIC group for all the regions in the group.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 14499

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	38000.	3.	592.	8590589.	1452.
FLOW (MGY)	469987.	0.	706.	10231149.	5625.
TOTAL CAPITAL COST	1007273584.	1721.	618367.	8965709824.	8950119.
TOTAL ANNUAL O&M COST	13023192.	20.	41399.	600250880.	219798.
TOTAL ANNUAL COST	140946944.	238.	120058.	1740715776.	1308847.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
600250880.	448285440.	690359296.	1738895616.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	13023192.	501852.	1399344.	249083248.	1369809.	178.
100000. TO 500000.	499543.	100263.	206900.	151864528.	95997.	734.
50000. TO 100000.	99775.	50012.	69816.	56690896.	13858.	812.
10000. TO 50000.	49874.	10001.	21146.	104927408.	10158.	4962.
0. TO 10000.	9997.	20.	4938.	38578160.	2512.	7813.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	1208728576.	5029778.	24839360.	5663375360.	82186896.	228.
1000000. TO 5000000.	4978156.	1001932.	2018998.	2230992896.	989485.	1105.
500000. TO 1000000.	999680.	500294.	695255.	911479808.	138033.	1311.
100000. TO 500000.	499976.	100027.	217541.	1717704960.	99975.	7896.
0. TO 100000.	99997.	2066.	63882.	252906976.	22713.	3959.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	933376.	5127.	11186.	38936.	765.	8209.	83.	17886.	44.	16948.	16679.	26321.
MIN	0.	0.	0.	0.	3.	0.	0.	4.	0.	0.	0.	0.
AVE	2242.	29.	155.	107.	27.	210.	39.	166.	3.	5967.	6632.	2796.
TOT	2383110.	281195.	1379825.	1106432.	41997.	1351890.	4114.	1399425.	13376.	125315.	245402.	645776.
SD	29548.	117.	348.	750.	41.	372.	11.	466.	4.	4130.	3516.	4474.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1458.	76.	4390.	1390.	3944.	2045.	16.	2459.	30.	21.	1735.	911.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	45.	1.	24.	7.	27.	18.	3.	6.	1.	9.	626.	103.
TOT	47818.	10291.	215687.	73607.	34313.	117908.	287.	50474.	3431.	197.	23177.	23829.
SD	122.	2.	126.	32.	130.	62.	3.	35.	2.	5.	348.	154.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT WATER USE REGION MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 14499

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	38000.	3.	592.	8590589.	1452.
FLOW (MGY)	174719.	0.	620.	8985124.	3725.
TOTAL CAPITAL COST	154120048.	1721.	522344.	7573467136.	3149757.
TOTAL ANNUAL O&M COST	6808742.	20.	38341.	555906560.	182050.
TOTAL ANNUAL COST	25927248.	238.	104781.	1519222528.	571634.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
555906560.	378673152.	583156480.	1517736192.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	6808742.	501852.	1320536.	207324304.	1084478.	157.
100000. TO 500000.	499543.	100263.	207032.	150719040.	96800.	728.
50000. TO 100000.	99775.	50012.	69740.	54397008.	13950.	780.
10000. TO 50000.	49998.	10001.	21125.	105561840.	10164.	4997.
0. TO 10000.	9997.	20.	4940.	38712704.	2511.	7837.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	192650048.	5027460.	18724880.	4288000512.	25138864.	229.
1000000. TO 5000000.	4989713.	1011374.	1999746.	2259713280.	964615.	1130.
500000. TO 1000000.	999361.	500009.	693218.	922673152.	139285.	1331.
100000. TO 500000.	499478.	100083.	219590.	1771652608.	100192.	8068.
0. TO 100000.	99979.	2152.	64382.	240852304.	22616.	3741.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	127753.	4064.	8050.	21509.	490.	8209.	83.	9466.	43.	16948.	14642.	26321.
MIN	0.	0.	0.	0.	3.	0.	0.	4.	0.	0.	0.	0.
AVE	1239.	28.	148.	96.	25.	206.	38.	158.	3.	5867.	6365.	2681.
TOT	1316831.	263550.	1323793.	988797.	39556.	1327796.	4070.	1328130.	13226.	123198.	235504.	619354.
SD	7697.	99.	313.	601.	31.	359.	10.	390.	4.	4031.	3265.	4285.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1363.	59.	4390.	813.	1746.	2045.	16.	829.	25.	21.	1528.	881.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	41.	1.	23.	7.	16.	19.	3.	5.	1.	9.	600.	99.
TOT	44024.	10008.	200883.	68202.	25511.	114025.	270.	45084.	3357.	195.	22186.	22844.
SD	111.	2.	117.	27.	70.	58.	2.	20.	2.	5.	316.	147.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 14499

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	38000.	3.	592.	8590589.	1452.
FLOW (MGY)	81468.	0.	460.	6674736.	2423.
TOTAL CAPITAL COST	67004336.	1721.	411355.	5964230656.	1860742.
TOTAL ANNUAL O&M COST	3813776.	20.	30564.	443147776.	132981.
TOTAL ANNUAL COST	10486918.	238.	82886.	1201764352.	361306.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
443147776.	298211328.	459245312.	1200604416.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3813776.	504294.	1167878.	143649088.	742934.	123.
100000. TO 500000.	490134.	100160.	196022.	121337696.	91557.	619.
50000. TO 100000.	99528.	50024.	69933.	46575184.	13992.	666.
10000. TO 50000.	49985.	10001.	20412.	90444240.	9926.	4431.
0. TO 10000.	9997.	20.	4831.	41834240.	2450.	8660.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	80405184.	5029778.	14707182.	2588464128.	13548046.	176.
1000000. TO 5000000.	4987889.	1002542.	1985229.	1907805440.	952828.	961.
500000. TO 1000000.	998888.	500294.	704651.	751862528.	141928.	1067.
100000. TO 500000.	499976.	100027.	212807.	1622016512.	99018.	7622.
0. TO 100000.	99997.	2066.	64268.	300326656.	22591.	4673.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	37601.	4064.	5265.	21509.	412.	8209.	81.	6869.	35.	10781.	9668.	26321.
MIN	0.	0.	0.	0.	3.	0.	0.	4.	0.	0.	0.	0.
AVE	680.	23.	126.	71.	23.	184.	36.	137.	3.	4173.	4919.	2213.
TOT	723159.	219882.	1128432.	733697.	35927.	1184944.	3847.	1151209.	11065.	87640.	182020.	511156.
SD	3339.	82.	255.	417.	25.	308.	8.	304.	3.	2591.	2146.	3563.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	797.	50.	2428.	695.	1202.	2045.	15.	484.	18.	15.	1019.	881.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	33.	1.	18.	5.	12.	15.	2.	4.	1.	7.	467.	82.
TOT	35539.	8936.	156271.	52633.	19393.	94582.	225.	37126.	2562.	151.	17291.	19013.
SD	83.	2.	85.	20.	47.	47.	2.	13.	1.	4.	210.	122.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)
TOTAL NUMBER OF MANUFACTURING PLANTS... 14499

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	38000.	3.	592.	8590589.	1452.
FLOW (MGY)	65893.	0.	348.	5043972.	1734.
TOTAL CAPITAL COST	64726384.	1721.	334083.	4843876352.	1350181.
TOTAL ANNUAL O&M COST	3101819.	20.	24207.	350978560.	100533.
TOTAL ANNUAL COST	10090902.	238.	66683.	966842880.	265297.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
350978560.	242193792.	372978176.	966150400.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3101819.	503414.	1021593.	96029776.	561087.	94.
100000. TO 500000.	491766.	100382.	194264.	95189136.	91860.	490.
50000. TO 100000.	99984.	50005.	70816.	39373952.	14194.	556.
10000. TO 50000.	49969.	10012.	20258.	77060736.	9921.	3804.
0. TO 10000.	9997.	20.	4590.	43857472.	2421.	9555.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	80907968.	5027460.	12746127.	1848188416.	10328541.	145.
1000000. TO 5000000.	4895670.	1001477.	1959603.	1683299584.	914512.	859.
500000. TO 1000000.	999554.	500238.	702051.	700646656.	142496.	998.
100000. TO 500000.	499571.	100019.	208021.	1498373120.	97919.	7203.
0. TO 100000.	99968.	2152.	63323.	335229952.	22446.	5294.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	35206.	3469.	4450.	17450.	276.	7299.	73.	5269.	28.	8653.	8508.	25800.
MIN	0.	0.	0.	0.	3.	0.	0.	4.	0.	0.	0.	0.
AVE	394.	19.	105.	54.	20.	166.	34.	118.	2.	3427.	4222.	1832.
TOT	418684.	176812.	939699.	561832.	30578.	1067108.	3612.	991527.	9193.	71963.	156217.	423120.
SD	2015.	66.	203.	320.	19.	275.	7.	250.	2.	2023.	1831.	2914.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	654.	42.	1970.	574.	577.	1717.	11.	271.	14.	12.	851.	864.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	25.	1.	13.	4.	8.	13.	2.	4.	0.	0.	0.	0.
TOT	27052.	7879.	117179.	41020.	13184.	80911.	193.	31112.	1965.	130.	6.	69.
SD	64.	1.	62.	15.	25.	39.	1.	9.	1.	3.	403.	15873.
											14904.	100.
											178.	

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW OF MOST EFFICIENT WATER USE REGION USED THROUGHOUT
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 14499

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	38000.	3.	592.	8590589.	1452.
FLOW (MGY)	39050.	0.	189.	2740738.	852.
TOTAL CAPITAL COST	21954304.	1489.	214934.	3116322560.	634135.
TOTAL ANNUAL O&M COST	1665295.	19.	14265.	206828784.	48723.
TOTAL ANNUAL COST	4458571.	209.	41505.	601775616.	126860.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
206828784.	155816112.	239956704.	602601216.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1665295.	508166.	753271.	24857936.	249926.	33.
100000. TO 500000.	499293.	101221.	202037.	51317376.	99712.	254.
50000. TO 100000.	99358.	50071.	69358.	28644784.	14427.	413.
10000. TO 50000.	49802.	10002.	20572.	59760672.	10042.	2905.
0. TO 10000.	9998.	19.	3880.	42268624.	2356.	10894.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	27492880.	5128032.	9341816.	597876224.	4681241.	64.
1000000. TO 5000000.	4976046.	1002204.	1850686.	1069697024.	887512.	578.
500000. TO 1000000.	998619.	500607.	689796.	594604032.	136974.	862.
100000. TO 500000.	499952.	100019.	216490.	1205200384.	103200.	5567.
0. TO 100000.	99986.	1861.	57736.	428864000.	22555.	7428.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	6234.	2347.	2210.	10419.	217.	5464.	67.	3775.	25.	3288.	7048.	11793.
MIN	0.	0.	0.	0.	2.	0.	0.	3.	0.	0.	0.	0.
AVE	96.	12.	70.	29.	17.	131.	31.	89.	2.	1468.	2731.	898.
TOT	101728.	114281.	627068.	303043.	26357.	841161.	3339.	751785.	7451.	30825.	101049.	207455.
SD	366.	39.	112.	174.	16.	202.	.	171.	2.	718.	1291.	1347.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	267.	28.	738.	359.	370.	1116.	8.	162.	9.	6.	604.	403.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	11.	1.	7.	2.	6.	9.	2.	3.	0.	3.	263.	34.
TOT	12204.	6245.	59027.	22887.	9631.	54750.	163.	22642.	1469.	69.	9727.	7966.
SD	26.	1.	24.	8.	17.	25.	1.	5.	1.	1.	123.	48.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

State Summaries for Manufacturing

Each table summarizes manufacturers, as a group, and includes all SIC categories within the State. For each State costs are presented in terms of three efficiency levels: (1) water use as reported in 1968, (2) median efficiency, and (3) with regional values below the efficiency of the most efficient third made equal to the least efficient region in the most efficient third.

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ALABAMA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 258

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4200.	7.	475.	122550.	627.
FLOW (MGY)	41100.	8.	841.	216977.	3631.
TOTAL CAPITAL COST	12302534.	22528.	441661.	113948640.	1213673.
TOTAL ANNUAL O&M COST	957214.	1208.	36281.	9360508.	106401.
TOTAL ANNUAL COST	2329263.	4126.	92370.	23831488.	258158.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
9360508.	5697431.	8774040.	23831968.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	957214.	582287.	743710.	2974841.	186309.	4.
100000. TO 500000.	455211.	101952.	211508.	3384128.	93864.	16.
50000. TO 100000.	97352.	54291.	68891.	551131.	14420.	8.
10000. TO 50000.	45359.	10023.	20445.	1676520.	8738.	82.
0. TO 10000.	9970.	1208.	5229.	773934.	2346.	148.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	15378167.	5125247.	9671692.	48358464.	4034807.	5.
1000000. TO 5000000.	4710232.	1072711.	2113398.	46494768.	1054203.	22.
500000. TO 1000000.	904356.	559726.	675995.	10135932.	111979.	15.
100000. TO 500000.	499217.	100556.	210225.	33215536.	94113.	158.
0. TO 100000.	95889.	28160.	72898.	4228075.	20914.	58.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1038.	342.	1183.	3376.	68.	3210.	34.	3169.	7.	0.	4654.	860.
MIN	0.	1.	0.	0.	9.	0.	0.	11.	0.	0.	0.	0.
AVE	130.	21.	128.	104.	19.	271.	32.	184.	3.	0.	4654.	659.
TOT	3644.	3238.	17583.	20156.	744.	31466.	95.	29808.	183.	0.	4654.	1978.
SD	210.	43.	167.	397.	10.	505.	2.	427.	1.	0.	0.	200.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	107.	6.	277.	166.	39.	661.	2.	171.	1.	0.	418.	30.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	20.	1.	15.	6.	6.	30.	2.	6.	0.	0.	418.	23.
TOT	564.	127.	2163.	1251.	231.	3462.	5.	1038.	33.	0.	418.	70.
SD	25.	1.	34.	19.	6.	88.	0.	19.	0.	0.	0.	7.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

ALABAMA

FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 258

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4200.	7.	475.	122550.	627.
FLOW (MGY)	21559.	5.	537.	138650.	1947.
TOTAL CAPITAL COST	7751773.	16364.	353155.	91113872.	813803.
TOTAL ANNUAL O&M COST	574123.	881.	27668.	7138458.	70865.
TOTAL ANNUAL COST	1463921.	2959.	72518.	18709600.	172078.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
7138458.	4555693.	7015764.	18709904.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	574123.	574123.	574123.	574123.	0.	1.
100000. TO 500000.	479447.	107207.	235291.	3764659.	113183.	16.
50000. TO 100000.	87961.	54291.	69630.	626667.	12257.	9.
10000. TO 50000.	47244.	10157.	19503.	1345678.	8035.	69.
0. TO 10000.	9970.	881.	5076.	827381.	2406.	163.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	9689716.	5195718.	7485648.	22456944.	2248251.	3.
1000000. TO 5000000.	4884566.	1027821.	2055845.	47284448.	1093507.	23.
500000. TO 1000000.	914969.	508249.	686062.	10290932.	136130.	15.
100000. TO 500000.	498866.	100556.	195770.	29169664.	86483.	149.
0. TO 100000.	98978.	20455.	68989.	4691243.	21975.	68.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1038.	342.	1183.	1787.	60.	2246.	33.	2093.	6.	0.	3073.	860.
MIN	0.	1.	0.	0.	8.	0.	0.	11.	0.	0.	0.	0.
AVE	129.	20.	115.	67.	17.	221.	31.	146.	2.	0.	3073.	659.
TOT	3605.	3068.	16151.	13049.	693.	25654.	94.	23593.	156.	0.	3073.	1978.
SD	210.	43.	164.	220.	9.	360.	2.	283.	1.	0.	0.	200.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	107.	6.	277.	93.	31.	388.	2.	93.	1.	0.	279.	30.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	20.	1.	14.	5.	5.	20.	1.	5.	0.	0.	279.	23.
TOT	560.	122.	1922.	889.	204.	2326.	4.	736.	26.	0.	279.	70.
SD	25.	1.	34.	11.	5.	52.	0.	10.	0.	0.	0.	7.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

ALABAMA
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 258

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4200.	7.	475.	122550.	627.
FLOW (MGY)	16190.	4.	397.	102539.	1458.
TOTAL CAPITAL COST	6335472.	14127.	286968.	74037744.	660062.
TOTAL ANNUAL O&M COST	450110.	752.	21331.	5503461.	55082.
TOTAL ANNUAL COST	1194804.	2547.	57777.	14906386.	137278.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
5503461.	3701896.	5700903.	14906250.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	450110.	101472.	212482.	3187235.	106693.	15.
50000. TO 100000.	88891.	62921.	74274.	371372.	11554.	5.
10000. TO 50000.	46763.	10368.	19947.	1077117.	10420.	54.
0. TO 10000.	9997.	752.	4716.	867794.	2438.	184.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	7919340.	6191507.	7055423.	14110847.	1221755.	2.
1000000. TO 5000000.	4268518.	1055070.	2100459.	35707808.	1036367.	17.
500000. TO 1000000.	993066.	507646.	672661.	12780558.	149778.	19.
100000. TO 500000.	483692.	100372.	188127.	23703984.	89284.	126.
0. TO 100000.	99495.	17658.	66438.	6245132.	21437.	94.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	643.	291.	951.	1348.	40.	1917.	30.	1741.	6.	0.	2556.	647.
MIN	0.	1.	0.	0.	6.	0.	0.	10.	0.	0.	0.	0.
AVE	85.	15.	91.	50.	15.	192.	28.	122.	2.	0.	2556.	496.
TOT	2366.	2358.	12736.	9660.	581.	22315.	85.	19767.	127.	0.	2556.	1487.
SD	131.	35.	132.	166.	6.	307.	2.	235.	1.	0.	0.	150.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	81.	5.	203.	72.	15.	307.	1.	72.	1.	0.	233.	23.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	15.	1.	10.	3.	4.	16.	1.	4.	0.	0.	233.	18.
TOT	418.	105.	1385.	669.	144.	1870.	4.	603.	20.	0.	233.	53.
SD	19.	1.	25.	9.	3.	41.	0.	8.	0.	0.	0.	5.

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ALASKA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 15

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	750.	30.	259.	3888.	228.
FLOW (MGY)	16666.	18.	3062.	45937.	6169.
TOTAL CAPITAL COST	13323295.	46068.	2654571.	39818576.	4973863.
TOTAL ANNUAL O&M COST	1236938.	2956.	238864.	3582953.	464965.
TOTAL ANNUAL COST	2928596.	8807.	575994.	8639915.	1096627.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
3582953.	1990528.	3066028.	8639909.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1236938.	904776.	1126217.	3378652.	191773.	3.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	24707.	14831.	18304.	201346.	4326.	11.
0. TO 10000.	2956.	2956.	2956.	2956.	0.	1.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	16654118.	12245500.	15184576.	45553728.	2545327.	3.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	521308.	521308.	521308.	1042615.	256.	2.
100000. TO 500000.	441843.	208678.	346592.	3119331.	63208.	9.
0. TO 100000.	57585.	57585.	57585.	57585.	0.	1.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	29.	145.	3542.	0.	1966.	0.	2726.	0.	0.	4029.	0.
MIN	0.	0.	27.	0.	0.	0.	0.	19.	0.	0.	0.	0.
AVE	0.	19.	86.	1889.	0.	552.	0.	628.	0.	0.	4679.	0.
TOT	0.	190.	171.	9447.	0.	7176.	0.	8796.	0.	0.	14037.	0.
SD	0.	6.	83.	1776.	0.	734.	0.	1030.	0.	0.	710.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	2.	10.	164.	0.	276.	0.	113.	0.	0.	683.	0.
MIN	0.	0.	2.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	10.	89.	0.	66.	0.	25.	0.	0.	629.	0.
TOT	0.	13.	21.	446.	0.	862.	0.	353.	0.	0.	1888.	0.
SD	0.	0.	12.	81.	0.	106.	0.	42.	0.	0.	93.	0.

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ALASKA
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 15

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	750.	30.	259.	3888.	228.
FLOW (MGY)	16666.	14.	3027.	45405.	6187.
TOTAL CAPITAL COST	13323295.	38258.	2609432.	39141488.	4996598.
TOTAL ANNUAL O&M COST	1236938.	2419.	235824.	3537358.	466510.
TOTAL ANNUAL COST	2928996.	7278.	567222.	8508331.	1101063.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
3537358.	1957074.	3013893.	8508325.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1236938.	904776.	1126217.	3378652.	191773.	3.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	22755.	11525.	14208.	156288.	4076.	11.
0. TO 10000.	2419.	2419.	2419.	2419.	0.	1.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	16654118.	12245500.	15184576.	45553728.	2545327.	3.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	421304.	208678.	302305.	3325354.	64883.	11.
0. TO 100000.	47822.	47822.	47822.	47822.	0.	1.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	22.	145.	3542.	0.	1966.	0.	2726.	0.	0.	5089.	0.
MIN	0.	0.	22.	0.	0.	0.	0.	16.	0.	0.	0.	0.
AVE	0.	15.	83.	1886.	0.	527.	0.	608.	0.	0.	4679.	0.
TOT	0.	148.	167.	9431.	0.	6845.	0.	8513.	0.	0.	14037.	0.
SD	0.	4.	87.	1780.	0.	748.	0.	1040.	0.	0.	710.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	1.	19.	164.	0.	276.	0.	113.	0.	0.	683.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	10.	89.	0.	64.	0.	25.	0.	0.	629.	0.
TOT	0.	11.	20.	444.	0.	831.	0.	343.	0.	0.	1888.	0.
SD	0.	0.	13.	82.	0.	107.	0.	42.	0.	0.	93.	0.

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ALASKA
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 15

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	750.	30.	259.	3888.	228.
FLOW (MGY)	12743.	11.	2313.	34701.	4731.
TOTAL CAPITAL COST	10989085.	32930.	2159589.	32393840.	4120781.
TOTAL ANNUAL O&M COST	1017048.	2069.	193712.	2905673.	303894.
TOTAL ANNUAL COST	2412660.	6251.	467980.	7019693.	907224.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2905673.	1619691.	2494324.	7019688.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1017048.	745569.	926554.	2779663.	156742.	3.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	16026.	11980.	14067.	56267.	2264.	4.
0. TO 10000.	9793.	2069.	8718.	69742.	2704.	8.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	13736356.	10129138.	12533946.	37601840.	2082638.	3.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	366220.	103058.	259031.	2849338.	70894.	11.
0. TO 100000.	41162.	41162.	41162.	41162.	0.	1.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	19.	74.	2718.	0.	1695.	0.	2294.	0.	0.	4282.	0.
MIN	0.	0.	19.	0.	0.	0.	0.	14.	0.	0.	0.	0.
AVE	0.	12.	47.	1447.	0.	457.	0.	514.	0.	0.	3937.	0.
TOT	0.	121.	93.	7236.	0.	5938.	0.	7195.	0.	0.	11811.	0.
SD	0.	4.	39.	1367.	0.	643.	0.	874.	0.	0.	597.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	1.	7.	129.	0.	222.	0.	89.	0.	0.	577.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	4.	70.	0.	51.	0.	20.	0.	0.	532.	0.
TOT	0.	10.	8.	348.	0.	669.	0.	275.	0.	0.	1595.	0.
SD	0.	0.	4.	65.	0.	86.	0.	33.	0.	0.	79.	0.

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ARIZONA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 58

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	12000.	20.	730.	42341.	1718.
FLOW (MGY)	3758.	7.	470.	27254.	721.
TOTAL CAPITAL COST	1995972.	23954.	356826.	20695904.	387476.
TOTAL ANNUAL O&M COST	191160.	1500.	32396.	1878954.	46569.
TOTAL ANNUAL COST	413571.	4542.	77713.	4507344.	93261.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1878954.	1034795.	1593583.	4507332.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	191160.	147976.	170667.	853335.	16948.	5.
50000. TO 100000.	80702.	51593.	61767.	308836.	13424.	5.
10000. TO 50000.	47104.	10662.	23249.	604469.	11238.	26.
0. TO 10000.	9909.	1500.	5106.	112323.	2403.	22.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2494965.	1031374.	1371291.	12341624.	473890.	9.
500000. TO 1000000.	869362.	526715.	699343.	5594742.	97905.	8.
100000. TO 500000.	483935.	105851.	252409.	7067441.	115797.	28.
0. TO 100000.	94601.	29942.	66635.	866255.	23319.	13.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	179.	727.	339.	34.	925.	0.	738.	11.	0.	0.	0.
MIN	0.	2.	0.	0.	15.	0.	0.	18.	0.	0.	0.	0.
AVE	0.	35.	170.	62.	25.	240.	0.	163.	3.	0.	0.	0.
TOT	0.	1077.	5778.	2851.	50.	5999.	0.	4898.	43.	0.	0.	0.
SD	0.	54.	207.	95.	13.	190.	0.	145.	3.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	5.	150.	36.	15.	112.	0.	25.	4.	0.	0.	0.
MIN	0.	0.	0.	0.	4.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	26.	6.	9.	19.	0.	5.	1.	0.	0.	0.
TOT	0.	43.	868.	293.	19.	487.	0.	158.	11.	0.	0.	0.
SD	0.	1.	43.	9.	8.	22.	0.	5.	1.	0.	0.	0.

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ARIZONA
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 58

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	12000.	20.	730.	42341.	1718.
FLOW (MGY)	3090.	7.	372.	21560.	672.
TOTAL CAPITAL COST	1755300.	23954.	292937.	16990320.	361683.
TOTAL ANNUAL O&M COST	191160.	1500.	27400.	1589206.	46154.
TOTAL ANNUAL COST	359007.	4542.	64603.	3746970.	90080.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1589206.	849516.	1308253.	3746974.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	191160.	136084.	165867.	829336.	23010.	5.
50000. TO 100000.	80702.	71257.	75980.	151959.	6679.	2.
10000. TO 50000.	45795.	10701.	22356.	447115.	11970.	20.
0. TO 10000.	9828.	1500.	5187.	160802.	2220.	31.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2194125.	1256486.	1584938.	7924693.	357932.	5.
500000. TO 1000000.	936646.	526372.	718481.	6466330.	162458.	9.
100000. TO 500000.	483935.	109851.	200805.	5823347.	94651.	29.
0. TO 100000.	97759.	29942.	68237.	1023548.	23338.	15.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	179.	727.	339.	28.	830.	0.	651.	10.	0.	0.	0.
MIN	0.	2.	0.	0.	12.	0.	0.	13.	0.	0.	0.	0.
AVE	0.	33.	163.	53.	20.	178.	0.	115.	3.	0.	0.	0.
TOT	0.	1034.	5525.	2428.	40.	4459.	0.	3464.	40.	0.	0.	0.
SD	0.	54.	209.	92.	11.	175.	0.	129.	3.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	5.	150.	36.	10.	95.	0.	21.	4.	0.	0.	0.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	25.	6.	6.	13.	0.	4.	1.	0.	0.	0.
TOT	0.	42.	833.	255.	12.	326.	0.	111.	10.	0.	0.	0.
SD	0.	1.	44.	9.	5.	19.	0.	4.	1.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

ARIZONA
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 58

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	12000.	20.	730.	42341.	1718.
FLOW (MGY)	2451.	7.	333.	19299.	621.
TOTAL CAPITAL COST	1456610.	23954.	269118.	15608884.	337424.
TOTAL ANNUAL O&M COST	191160.	1500.	25327.	1468979.	45233.
TOTAL ANNUAL COST	349230.	4542.	59505.	3451296.	86343.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1468979.	780442.	1201880.	3451301.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	191160.	107382.	160127.	800634.	33491.	5.
50000. TO 100000.	80702.	71257.	75980.	151959.	6679.	2.
10000. TO 50000.	38254.	11605.	20287.	344871.	9749.	17.
0. TO 10000.	9912.	1500.	5045.	171521.	2265.	34.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1820762.	1256486.	1510266.	7551330.	205600.	5.
500000. TO 1000000.	782617.	538501.	696456.	4875192.	88846.	7.
100000. TO 500000.	484852.	100317.	203688.	5906948.	118607.	29.
0. TO 100000.	98010.	29942.	69270.	1177593.	23378.	17.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	179.	727.	339.	24.	709.	0.	541.	10.	0.	0.	0.
MIN	0.	2.	0.	0.	11.	0.	0.	11.	0.	0.	0.	0.
AVE	0.	32.	156.	49.	17.	159.	0.	100.	2.	0.	0.	0.
TOT	0.	1002.	5294.	2262.	35.	3977.	0.	3003.	37.	0.	0.	0.
SD	0.	54.	210.	89.	9.	149.	0.	108.	3.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	5.	150.	36.	8.	75.	0.	17.	4.	0.	0.	0.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	24.	5.	5.	11.	0.	3.	1.	0.	0.	0.
TOT	0.	41.	802.	240.	10.	271.	0.	96.	9.	0.	0.	0.
SD	0.	1.	44.	9.	4.	15.	0.	3.	1.	0.	0.	0.

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ARKANSAS
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 169

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3250.	5.	330.	55794.	388.
FLOW (MGY)	8805.	7.	386.	65269.	1238.
TOTAL CAPITAL COST	6663733.	21172.	317180.	53603344.	778047.
TOTAL ANNUAL O&M COST	360584.	1039.	16324.	2758834.	42120.
TOTAL ANNUAL COST	1206877.	3728.	56606.	9566487.	137589.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2758834.	2680167.	4127455.	9566456.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	360584.	105823.	227288.	1136442.	93628.	5.
50000. TO 100000.	77117.	61495.	70582.	423494.	5872.	6.
10000. TO 50000.	46769.	10014.	17971.	736831.	10062.	41.
0. TO 10000.	9458.	1039.	3950.	462096.	2171.	117.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	8329666.	5981928.	7155797.	14311594.	1660098.	2.
1000000. TO 5000000.	4526692.	1064313.	2213473.	24348208.	1331026.	11.
500000. TO 1000000.	861256.	503597.	629863.	5038903.	129001.	8.
100000. TO 500000.	480224.	100702.	215388.	19815664.	99222.	92.
0. TO 100000.	99290.	26465.	62325.	3490215.	20614.	56.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	626.	230.	766.	1471.	118.	1313.	58.	1430.	15.	4019.	2668.	1186.
MIN	0.	1.	0.	0.	5.	0.	0.	10.	0.	0.	0.	0.
AVE	103.	13.	101.	53.	19.	145.	58.	106.	3.	3415.	2668.	710.
TOT	930.	1134.	6678.	5333.	620.	13052.	58.	13300.	121.	6830.	2668.	2840.
SD	201.	27.	141.	175.	23.	198.	0.	201.	2.	855.	0.	509.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	36.	3.	81.	42.	100.	156.	5.	35.	3.	5.	213.	36.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	8.	1.	9.	3.	9.	9.	5.	3.	0.	5.	213.	22.
TOT	75.	45.	600.	305.	289.	776.	5.	334.	19.	10.	213.	87.
SD	12.	0.	18.	7.	24.	19.	0.	5.	1.	1.	0.	15.

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ARKANSAS
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 169

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3250.	5.	330.	55794.	388.
FLOW (MGY)	8805.	7.	320.	54108.	1045.
TOTAL CAPITAL COST	6663733.	21172.	291423.	49250480.	723687.
TOTAL ANNUAL O&M COST	360584.	1039.	14208.	2401120.	36997.
TOTAL ANNUAL COST	1206877.	3728.	51219.	8655959.	126900.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2401120.	2462523.	3792285.	8655928.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	360584.	162774.	249954.	749863.	100968.	3.
50000. TO 100000.	96023.	54176.	70821.	566564.	12224.	8.
10000. TO 50000.	46457.	10014.	16817.	588587.	8724.	35.
0. TO 10000.	8950.	1039.	4034.	496134.	2214.	123.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	8329666.	5385775.	6857720.	13715441.	2081647.	2.
1000000. TO 5000000.	3905701.	1086923.	2193818.	19744368.	1093471.	9.
500000. TO 1000000.	861256.	503597.	676124.	4732867.	133300.	7.
100000. TO 500000.	468378.	101048.	213571.	19648560.	97822.	92.
0. TO 100000.	98767.	26465.	63089.	3722273.	20713.	59.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	309.	154.	586.	1471.	92.	1313.	41.	1430.	15.	3601.	2668.	1186.
MIN	0.	1.	0.	0.	5.	0.	0.	10.	0.	0.	0.	0.
AVE	68.	11.	86.	45.	17.	140.	41.	99.	3.	3060.	2668.	710.
TOT	612.	966.	5666.	4592.	548.	12560.	41.	12521.	116.	6120.	2668.	2840.
SD	102.	19.	112.	166.	16.	195.	0.	186.	2.	766.	0.	509.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	23.	2.	73.	42.	62.	156.	2.	35.	3.	5.	213.	36.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	7.	0.	7.	3.	6.	8.	2.	2.	0.	4.	213.	22.
TOT	62.	43.	469.	261.	182.	741.	2.	314.	18.	9.	213.	87.
SD	9.	0.	14.	6.	12.	19.	0.	5.	1.	1.	0.	15.

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ARKANSAS
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 169

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3250.	5.	330.	55794.	388.
FLOW (MGY)	7285.	6.	257.	43457.	835.
TOTAL CAPITAL COST	5834057.	18647.	254028.	42930656.	614155.
TOTAL ANNUAL O&M COST	314775.	756.	12024.	2032074.	31050.
TOTAL ANNUAL COST	1055699.	3260.	44286.	7484310.	107561.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2032074.	2146532.	3305658.	7484264.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	314775.	193197.	253986.	507972.	85968.	2.
50000. TO 100000.	79053.	57642.	67436.	539491.	8343.	8.
10000. TO 50000.	39799.	10136.	17403.	469880.	9367.	27.
0. TO 10000.	9751.	756.	3900.	514761.	2243.	132.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	7292571.	7292571.	7292571.	7292571.	0.	1.
1000000. TO 5000000.	4366876.	1366758.	2366596.	18932768.	1124189.	8.
500000. TO 1000000.	999554.	595121.	817243.	4903458.	161030.	6.
100000. TO 500000.	492303.	100102.	216024.	18146032.	101423.	84.
0. TO 100000.	99693.	23309.	62702.	4389144.	21533.	70.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	123.	79.	439.	1220.	62.	1182.	37.	1266.	14.	2891.	2362.	1186.
MIN	0.	1.	0.	0.	5.	0.	0.	8.	0.	0.	0.	0.
AVE	46.	9.	72.	36.	15.	128.	37.	88.	2.	2456.	2362.	710.
TOT	411.	791.	4778.	3680.	485.	11486.	37.	11045.	105.	4912.	2362.	2840.
SD	52.	12.	92.	136.	12.	176.	0.	158.	2.	615.	0.	509.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	16.	1.	60.	36.	30.	134.	2.	30.	3.	4.	189.	36.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	6.	0.	6.	2.	4.	7.	2.	2.	0.	4.	189.	22.
TOT	50.	40.	374.	215.	131.	645.	2.	276.	16.	8.	189.	87.
SD	6.	0.	12.	5.	6.	17.	0.	4.	0.	1.	0.	15.

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CALIFORNIA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1075

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	22000.	4.	535.	575279.	1323.
FLOW (MGY)	11521.	0.	305.	327494.	756.
TOTAL CAPITAL COST	14700979.	2353.	355138.	381773824.	759074.
TOTAL ANNUAL O&M COST	787954.	292.	26133.	28093200.	56055.
TOTAL ANNUAL COST	2603061.	591.	71241.	76584080.	147956.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
28093200.	19088688.	29396560.	76578448.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	787954.	525777.	647157.	2588628.	134395.	4.
100000. TO 500000.	485468.	101716.	194918.	7017065.	90484.	36.
50000. TO 100000.	99660.	50187.	69458.	6181796.	14822.	89.
10000. TO 50000.	49574.	10075.	22391.	9560867.	10279.	427.
0. TO 10000.	5966.	292.	5296.	2748464.	2412.	519.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	183762C8.	5681357.	9413730.	56482384.	5110836.	6.
1000000. TO 5000000.	4895670.	1015347.	1910268.	170013856.	964838.	89.
500000. TO 1000000.	982193.	503048.	689810.	97953056.	133258.	142.
100000. TO 500000.	499478.	100153.	234618.	136312880.	106848.	581.
0. TO 100000.	99290.	2941.	64302.	16525506.	20922.	257.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	3674.	378.	2111.	1037.	164.	1471.	43.	1806.	12.	1960.	0.	9541.
MIN	0.	0.	0.	0.	5.	0.	0.	11.	0.	0.	0.	0.
AVE	180.	20.	128.	42.	27.	197.	37.	142.	3.	1715.	0.	2089.
TOT	14947.	14995.	79370.	30516.	2920.	95426.	262.	89065.	760.	3430.	0.	50127.
SD	485.	36.	166.	97.	23.	201.	4.	171.	2.	346.	0.	2208.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	183.	7.	678.	104.	197.	170.	3.	62.	4.	4.	0.	364.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	19.	1.	15.	4.	13.	15.	2.	5.	1.	4.	0.	82.
TOT	1601.	717.	9264.	2895.	1446.	7141.	14.	2868.	169.	8.	0.	1974.
SD	30.	1.	37.	7.	25.	23.	0.	5.	1.	1.	0.	84.

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CALIFORNIA
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1075

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	22000.	4.	535.	575279.	1323.
FLOW (MGY)	11521.	0.	265.	284810.	735.
TOTAL CAPITAL COST	14700979.	2353.	324876.	349241600.	749635.
TOTAL ANNUAL O&M COST	787954.	292.	23507.	25270304.	55125.
TOTAL ANNUAL COST	2603061.	591.	64772.	69629776.	145924.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
25270304.	17462064.	26891584.	69623952.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	787954.	525777.	647157.	2588628.	134395.	4.
100000. TO 500000.	489468.	103765.	199916.	6397303.	92578.	32.
50000. TO 100000.	99113.	50092.	67557.	4796556.	14263.	71.
10000. TO 50000.	49574.	10009.	21176.	8703361.	10389.	411.
0. TO 10000.	9966.	292.	5005.	2787928.	2376.	557.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	18376208.	5681357.	9413730.	56482384.	5110836.	6.
1000000. TO 5000000.	4895670.	1012156.	1912997.	151126768.	989045.	79.
500000. TO 1000000.	992309.	501252.	690370.	75250352.	136528.	109.
100000. TO 500000.	497698.	100153.	228020.	135671760.	104654.	595.
0. TO 100000.	99290.	2941.	63252.	18090016.	21035.	286.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	3674.	346.	2111.	1037.	164.	1351.	43.	1806.	12.	1960.	0.	9541.
MIN	0.	0.	0.	0.	5.	0.	0.	11.	0.	0.	0.	0.
AVE	180.	19.	120.	36.	26.	174.	37.	125.	2.	1715.	0.	2089.
TOT	14947.	13984.	74013.	26176.	2806.	84268.	262.	78568.	705.	3430.	0.	50127.
SD	485.	34.	161.	91.	24.	187.	4.	163.	2.	346.	0.	2208.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	183.	7.	678.	104.	197.	163.	3.	62.	4.	4.	0.	364.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	19.	1.	14.	3.	13.	12.	2.	4.	1.	4.	0.	82.
TOT	1601.	692.	8399.	2494.	1387.	6017.	14.	2534.	153.	8.	0.	1974.
SD	30.	1.	36.	7.	25.	21.	0.	5.	1.	1.	0.	84.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

CALIFORNIA
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1075

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	22000.	4.	535.	575279.	1323.
FLOW (MGY)	5895.	0.	188.	202196.	476.
TOTAL CAPITAL COST	14700979.	2353.	274614.	295210496.	700617.
TOTAL ANNUAL O&M COST	736039.	292.	18314.	19687584.	43928.
TOTAL ANNUAL COST	2603061.	591.	53193.	57182400.	130527.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
19687584.	14760523.	22731184.	57179280.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	736039.	538860.	637449.	1274898.	139431.	2.
100000. TO 500000.	489468.	101008.	190423.	5141416.	94071.	27.
50000. TO 100000.	99802.	50005.	65489.	2750519.	14312.	42.
10000. TO 50000.	49009.	10057.	20217.	7419480.	9725.	367.
0. TO 10000.	9991.	292.	4872.	3103684.	2434.	637.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	18376208.	5681357.	9899628.	49498144.	5556985.	5.
1000000. TO 5000000.	4895670.	1013609.	1881659.	112899552.	897173.	60.
500000. TO 1000000.	977296.	501252.	703878.	56310240.	139616.	80.
100000. TO 500000.	499246.	100153.	221724.	127713280.	101279.	576.
0. TO 100000.	99663.	2941.	63949.	22637936.	22954.	354.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	3674.	254.	1376.	529.	110.	1097.	43.	1018.	9.	1960.	0.	9541.
MIN	0.	0.	0.	0.	4.	0.	0.	7.	0.	0.	0.	0.
AVE	156.	15.	97.	26.	20.	150.	37.	101.	2.	1715.	0.	2089.
TOT	12964.	10960.	60309.	19671.	2168.	72465.	262.	63275.	606.	3430.	0.	50127.
SD	473.	25.	123.	59.	16.	160.	4.	120.	2.	346.	0.	2208.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	183.	7.	370.	57.	95.	130.	3.	29.	3.	4.	0.	364.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	17.	1.	10.	3.	7.	10.	2.	3.	0.	4.	0.	82.
TOT	1413.	615.	6021.	1852.	816.	4809.	14.	2044.	123.	8.	0.	1974.
SD	30.	1.	23.	5.	12.	17.	0.	4.	0.	1.	0.	84.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

COLORADO
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 97

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	7500.	10.	480.	46550.	1071.
FLOW (MGY)	20529.	3.	850.	82423.	2420.
TOTAL CAPITAL COST	12246524.	12200.	745217.	72286016.	1592064.
TOTAL ANNUAL O&M COST	1643703.	782.	63826.	6191095.	181395.
TOTAL ANNUAL COST	3199011.	2331.	158469.	15371481.	378878.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
6191095.	3614300.	5566020.	15371415.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1643703.	1643703.	1643703.	1643703.	0.	1.
100000. TO 500000.	437354.	137039.	220511.	3307667.	72780.	15.
50000. TO 100000.	85925.	50305.	71704.	501926.	14867.	7.
10000. TO 50000.	31580.	10700.	18086.	470235.	6428.	26.
0. TO 10000.	9949.	782.	5575.	267590.	2582.	48.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	15308155.	5074037.	8653146.	25959440.	5768850.	3.
1000000. TO 5000000.	4650511.	1022620.	2786215.	50151872.	1310768.	18.
500000. TO 1000000.	791624.	503804.	637339.	2549356.	122393.	4.
100000. TO 500000.	436872.	101190.	203582.	10382705.	84794.	51.
0. TO 100000.	98967.	15251.	62601.	1314627.	27566.	21.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	6569.	624.	2483.	1837.	13[illegible].	1484.	32.	1470.	12.	0.	0.	3028.
MIN	0.	1.	0.	0.	7.	0.	0.	16.	0.	0.	0.	0.
AVE	1672.	79.	182.	193.	35.	391.	32.	229.	3.	0.	0.	2890.
TOT	8359.	4998.	7285.	11363.	496.	18772.	32.	15126.	77.	0.	0.	5780.
SD	2754.	133.	409.	358.	36.	461.	0.	290.	4.	0.	0.	194.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	363.	18.	1027.	192.	175.	193.	2.	51.	3.	0.	0.	124.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	107.	2.	40.	13.	32.	41.	2.	8.	1.	0.	0.	118.
TOT	535.	123.	1589.	772.	445.	1961.	2.	511.	18.	0.	0.	237.
SD	145.	3.	162.	28.	59.	58.	0.	10.	1.	0.	0.	8.

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COLORADO
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 97

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	7500.	10.	480.	46550.	1071.
FLOW (MGY)	18395.	3.	709.	68763.	2186.
TOTAL CAPITAL COST	10703240.	12200.	623470.	60476624.	1359413.
TOTAL ANNUAL O&M COST	1492168.	782.	54062.	5244042.	163102.
TOTAL ANNUAL COST	2851479.	2331.	133244.	12924632.	331512.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
5244042.	3023831.	4656697.	12924570.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1492168.	1492168.	1492168.	1492168.	0.	1.
100000. TO 500000.	437354.	118786.	181008.	2715116.	77543.	15.
50000. TO 100000.	83695.	54477.	65040.	390242.	10585.	6.
10000. TO 50000.	38656.	10022.	16894.	388552.	6907.	23.
0. TO 10000.	9738.	782.	4961.	257988.	2383.	52.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	13379050.	5577258.	9478152.	18956304.	5516708.	2.
1000000. TO 5000000.	3875386.	1022620.	2420253.	43564560.	987072.	18.
500000. TO 1000000.	909220.	587668.	762837.	2288512.	162698.	3.
100000. TO 500000.	483989.	106498.	190582.	9147929.	86148.	48.
0. TO 100000.	96532.	15251.	63038.	1638979.	25376.	26.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	5483.	575.	2314.	1649.	136.	1237.	32.	1470.	9.	0.	0.	2346.
MIN	0.	1.	0.	0.	7.	0.	0.	12.	0.	0.	0.	0.
AVE	1391.	65.	171.	152.	32.	330.	32.	193.	3.	0.	0.	2239.
TOT	6955.	4097.	6827.	8990.	455.	15837.	32.	12747.	59.	0.	0.	4478.
SD	2307.	112.	383.	293.	37.	385.	0.	262.	3.	0.	0.	151.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	332.	16.	930.	174.	175.	147.	2.	51.	2.	0.	0.	97.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	95.	2.	36.	11.	30.	32.	2.	7.	1.	0.	0.	92.
TOT	477.	108.	1449.	640.	417.	1523.	2.	430.	13.	0.	0.	185.
SD	134.	2.	147.	25.	59.	44.	0.	10.	1.	0.	0.	6.

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COLORADO
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 97

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	7500.	10.	480.	46550.	1071.
FLOW (MGY)	12810.	3.	555.	53872.	1702.
TOTAL CAPITAL COST	7040471.	12200.	494292.	47946352.	993663.
TOTAL ANNUAL O&M COST	1085523.	782.	42721.	4143946.	122950.
TOTAL ANNUAL COST	1979662.	2331.	105497.	10233195.	244585.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4143946.	2397317.	3691867.	10233130.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1085523.	1085523.	1085523.	1085523.	0.	1.
100000. TO 500000.	437354.	102845.	158781.	1905372.	92796.	12.
50000. TO 100000.	96163.	54477.	76402.	534816.	17617.	7.
10000. TO 50000.	45793.	10129.	18332.	348300.	10411.	19.
0. TO 10000.	9472.	782.	4655.	269962.	2368.	58.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	8800588.	5577258.	7188923.	14377846.	2279235.	2.
1000000. TO 5000000.	2883806.	1022620.	2025151.	32402416.	639737.	16.
500000. TO 1000000.	966439.	587668.	792449.	3962243.	150581.	5.
100000. TO 500000.	420555.	100369.	165881.	7464666.	72835.	45.
0. TO 100000.	98227.	15251.	59530.	1726371.	24098.	29.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	3071.	439.	1835.	1154.	136.	1005.	32.	1470.	7.	0.	0.	1763.
MIN	0.	1.	0.	0.	6.	0.	0.	10.	0.	0.	0.	0.
AVE	865.	51.	148.	113.	31.	275.	32.	163.	2.	0.	0.	1683.
TOT	4323.	3229.	5905.	6650.	429.	13200.	32.	10763.	49.	0.	0.	3366.
SD	1274.	88.	315.	216.	38.	314.	0.	237.	2.	0.	0.	113.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	246.	13.	671.	126.	175.	108.	2.	51.	2.	0.	0.	73.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	74.	1.	28.	8.	29.	24.	2.	5.	0.	0.	0.	70.
TOT	370.	92.	1120.	488.	403.	1157.	2.	363.	10.	0.	0.	140.
SD	99.	2.	106.	18.	60.	33.	0.	9.	0.	0.	0.	5.

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CONNECTICUT
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 306

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	26000.	4.	883.	270049.	2163.
FLOW (MGY)	8079.	0.	188.	57528.	667.
TOTAL CAPITAL COST	4430569.	3028.	177156.	58209824.	358498.
TOTAL ANNUAL O&M COST	403677.	285.	14105.	4316064.	31750.
TOTAL ANNUAL COST	966359.	670.	36604.	11200958.	76804.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4316064.	2710491.	4174154.	11200709.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	403677.	102258.	209494.	1087468.	121323.	5.
50000. TO 100000.	96176.	54593.	72707.	654364.	14319.	9.
10000. TO 50000.	38403.	10056.	18526.	1611789.	7468.	87.
0. TO 10000.	9943.	285.	4890.	1002545.	2475.	205.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	5538211.	5538211.	5538211.	5538211.	0.	1.
1000000. TO 5000000.	3502406.	1071328.	1790404.	14323238.	869927.	8.
500000. TO 1000000.	977830.	584307.	721317.	8655804.	132362.	12.
100000. TO 500000.	492123.	101861.	198437.	30956208.	96838.	156.
0. TO 100000.	99848.	3785.	64267.	8290422.	24690.	129.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	805.	279.	920.	803.	139.	1228.	0.	1484.	14.	0.	0.	0.
MIN	0.	0.	0.	0.	5.	0.	0.	5.	0.	0.	0.	0.
AVE	62.	10.	77.	21.	23.	124.	0.	111.	2.	0.	0.	0.
TOT	1051.	2514.	19220.	5832.	294.	13983.	0.	11005.	312.	0.	0.	0.
SD	192.	19.	81.	67.	36.	181.	0.	206.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	56.	5.	104.	39.	152.	171.	0.	47.	5.	0.	0.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	7.	1.	7.	2.	15.	10.	0.	4.	0.	0.	0.	0.
TOT	111.	178.	1710.	597.	198.	1075.	0.	376.	72.	0.	0.	0.
SD	16.	0.	11.	4.	41.	22.	0.	7.	1.	0.	0.	0.

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CONNECTICUT
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 306

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	26000.	4.	883.	270049.	2163.
FLOW (MGY)	8079.	0.	162.	49462.	589.
TOTAL CAPITAL COST	4430569.	3028.	162465.	49714400.	331824.
TOTAL ANNUAL O&M COST	403677.	285.	12679.	3879667.	29323.
TOTAL ANNUAL COST	966359.	670.	33313.	10193636.	70973.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
3879667.	2485719.	3828006.	10193392.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	403677.	101897.	207616.	830464.	136210.	4.
50000. TO 100000.	97433.	51924.	71455.	643094.	17914.	9.
10000. TO 50000.	44377.	10288.	18178.	1363379.	7134.	75.
0. TO 10000.	9903.	285.	4784.	1042834.	2452.	218.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	5538211.	5538211.	5538211.	5538211.	0.	1.
1000000. TO 5000000.	2892935.	1124138.	1714164.	10284984.	697310.	6.
500000. TO 1000000.	977830.	515020.	710205.	9942864.	158313.	14.
100000. TO 500000.	492123.	100681.	189546.	27484176.	88182.	145.
0. TO 100000.	99848.	3785.	63533.	8894557.	24200.	140.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	805.	279.	920.	803.	139.	1048.	0.	1484.	14.	0.	0.	0.
MIN	0.	0.	0.	0.	5.	0.	0.	5.	0.	0.	0.	0.
AVE	61.	9.	72.	19.	22.	112.	0.	99.	2.	0.	0.	0.
TOT	1042.	2359.	18155.	5134.	287.	12614.	0.	9837.	287.	0.	0.	0.
SD	193.	19.	80.	60.	36.	155.	0.	189.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	56.	5.	104.	39.	152.	135.	0.	47.	5.	0.	0.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	6.	1.	6.	2.	15.	8.	0.	3.	0.	0.	0.	0.
TOT	107.	172.	1585.	532.	194.	893.	0.	332.	65.	0.	0.	0.
SD	14.	0.	11.	4.	41.	17.	0.	6.	1.	0.	0.	0.

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CONNECTICUT
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 306

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	26000.	4.	883.	270049.	2163.
FLOW (MGY)	8079.	0.	205.	62741.	672.
TOTAL CAPITAL COST	4430569.	3028.	189161.	57883360.	360475.
TOTAL ANNUAL O&M COST	403677.	285.	15570.	4764548.	32594.
TOTAL ANNUAL COST	966359.	670.	39595.	12115981.	77772.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4764548.	2894167.	4457016.	12115731.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	403677.	129100.	220525.	1102625.	111223.	5.
50000. TO 100000.	96176.	54593.	72726.	727263.	13500.	10.
10000. TO 50000.	38403.	10056.	18953.	2046955.	7891.	108.
0. TO 10000.	9992.	285.	4851.	887796.	2659.	183.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	5538211.	5538211.	5538211.	5538211.	0.	1.
1000000. TO 5000000.	3502406.	1071328.	1731731.	15585583.	832561.	9.
500000. TO 1000000.	977830.	516472.	679012.	9506173.	129813.	14.
100000. TO 500000.	492123.	100083.	207767.	34489360.	94358.	166.
0. TO 100000.	99848.	3785.	62384.	7236531.	24624.	116.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	805.	279.	920.	803.	139.	1228.	0.	1484.	17.	0.	0.	0.
MIN	0.	0.	0.	0.	5.	0.	0.	5.	0.	0.	0.	0.
AVE	64.	11.	85.	24.	24.	126.	0.	115.	2.	0.	0.	0.
TOT	1084.	2816.	21309.	6464.	309.	14203.	0.	11337.	363.	0.	0.	0.
SD	192.	20.	87.	68.	36.	182.	0.	206.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	56.	5.	114.	39.	152.	171.	0.	47.	8.	0.	0.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	7.	1.	8.	2.	16.	10.	0.	4.	1.	0.	0.	0.
TOT	120.	189.	1996.	674.	212.	1097.	0.	388.	89.	0.	0.	0.
SD	14.	0.	13.	5.	41.	22.	0.	7.	1.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

DELAWARE
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 69

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	8500.	25.	520.	35884.	1121.
FLOW (MGY)	2478.	8.	304.	20996.	498.
TOTAL CAPITAL COST	6091577.	28579.	490718.	33859536.	794486.
TOTAL ANNUAL O&M COST	284314.	1176.	25939.	1789759.	46918.
TOTAL ANNUAL COST	1057543.	4806.	88260.	6089941.	143983.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1789759.	1692976.	2607182.	6089917.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	284314.	110672.	217818.	653453.	93686.	3.
50000. TO 100000.	72731.	52731.	58793.	352759.	7589.	6.
10000. TO 50000.	36900.	11068.	20001.	640033.	6838.	32.
0. TO 10000.	9957.	1176.	5126.	143524.	2796.	28.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	7614471.	7614471.	7614471.	7614471.	0.	1.
1000000. TO 5000000.	2452887.	1012700.	1562821.	14065391.	493468.	9.
500000. TO 1000000.	952670.	518615.	698647.	11876993.	137999.	17.
100000. TO 500000.	450584.	102375.	249378.	8229485.	115351.	33.
0. TO 100000.	95025.	35724.	59819.	538373.	25150.	9.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	850.	169.	849.	300.	41.	755.	0.	569.	9.	0.	0.	4480.
MIN	0.	2.	0.	0.	11.	0.	0.	12.	1.	0.	0.	0.
AVE	169.	30.	152.	52.	26.	232.	0.	158.	4.	0.	0.	4480.
TOT	1355.	1672.	6247.	2270.	285.	8801.	0.	8715.	35.	0.	0.	4480.
SD	306.	31.	166.	64.	10.	186.	0.	124.	3.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	70.	4.	153.	29.	14.	75.	0.	17.	2.	0.	0.	147.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	18.	1.	12.	4.	7.	13.	0.	4.	1.	0.	0.	147.
TOT	148.	56.	504.	156.	79.	483.	0.	210.	6.	0.	0.	147.
SD	30.	1.	26.	5.	4.	15.	0.	3.	1.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

DELAWARE
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 69

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	8500.	25.	520.	35884.	1121.
FLOW (MGY)	2478.	8.	286.	19752.	458.
TOTAL CAPITAL COST	4132308.	28579.	456443.	31494544.	600641.
TOTAL ANNUAL O&M COST	258467.	1176.	24236.	1672262.	40448.
TOTAL ANNUAL COST	720765.	4806.	82204.	5672089.	112533.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1672262.	1574727.	2425078.	5672067.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	258467.	110672.	188367.	565101.	74190.	3.
50000. TO 100000.	61529.	52731.	56887.	341323.	3955.	6.
10000. TO 50000.	36900.	11068.	20355.	610652.	6875.	30.
0. TO 10000.	9997.	1176.	5173.	155195.	2792.	30.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	5165385.	5165385.	5165385.	5165385.	0.	1.
1000000. TO 5000000.	2452887.	1012700.	1536693.	13830240.	480574.	9.
500000. TO 1000000.	952670.	518615.	698647.	11876993.	137999.	17.
100000. TO 500000.	450584.	102375.	246274.	7880765.	117165.	32.
0. TO 100000.	99025.	35724.	61507.	615068.	24305.	10.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	462.	169.	849.	300.	41.	672.	0.	497.	9.	0.	0.	3115.
MIN	0.	2.	0.	0.	11.	0.	0.	12.	1.	0.	0.	0.
AVE	121.	29.	146.	49.	26.	228.	0.	156.	4.	0.	0.	3115.
TOT	964.	1637.	6006.	2178.	282.	8679.	0.	8597.	35.	0.	0.	3115.
SD	192.	31.	159.	62.	10.	181.	0.	120.	4.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	63.	4.	153.	29.	14.	75.	0.	17.	2.	0.	0.	103.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	16.	1.	12.	3.	7.	12.	0.	4.	1.	0.	0.	103.
TOT	125.	55.	476.	150.	78.	473.	0.	207.	6.	0.	0.	103.
SD	25.	1.	25.	5.	4.	15.	0.	3.	1.	0.	0.	0.

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DELAWARE
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 69

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	8500.	25.	520.	35884.	1121.
FLOW (MGY)	2478.	8.	250.	17257.	403.
TOTAL CAPITAL COST	3070378.	28579.	414950.	28631552.	505294.
TOTAL ANNUAL O&M COST	258467.	1176.	21901.	1511179.	36976.
TOTAL ANNUAL COST	536315.	4806.	74600.	5147403.	96884.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1511179.	1431577.	2204628.	5147384.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	258467.	146378.	202422.	404845.	79260.	2.
50000. TO 100000.	84343.	52731.	60728.	364371.	12034.	6.
10000. TO 50000.	48804.	10488.	20334.	589674.	8621.	29.
0. TO 10000.	9117.	1176.	4759.	152298.	2476.	32.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3837972.	1012700.	1787040.	16083365.	892960.	9.
500000. TO 1000000.	952670.	541548.	695214.	11818636.	142499.	17.
100000. TO 500000.	450584.	105552.	234845.	7045341.	103857.	30.
0. TO 100000.	99025.	35724.	64795.	842330.	25443.	13.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	398.	169.	849.	300.	41.	577.	0.	416.	7.	0.	0.	2341.
MIN	0.	2.	0.	0.	10.	0.	0.	12.	1.	0.	0.	0.
AVE	99.	27.	143.	47.	24.	209.	0.	142.	3.	0.	0.	2341.
TOT	795.	1516.	5847.	2055.	264.	7952.	0.	7833.	28.	0.	0.	2341.
SD	155.	31.	156.	59.	10.	170.	0.	111.	3.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	63.	4.	153.	29.	14.	57.	0.	13.	1.	0.	0.	78.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	14.	1.	11.	3.	6.	11.	0.	3.	1.	0.	0.	78.
TOT	112.	52.	460.	140.	69.	409.	0.	186.	5.	0.	0.	78.
SD	23.	1.	25.	5.	4.	13.	0.	3.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

DISTRICT OF COLUMBIA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 20

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	600.	40.	216.	4320.	170.
FLOW (MGY)	411.	7.	81.	1619.	109.
TOTAL CAPITAL COST	287011.	30523.	95145.	1902904.	69638.
TOTAL ANNUAL O&M COST	40051.	1640.	7887.	157731.	10119.
TOTAL ANNUAL COST	76501.	5517.	19970.	399399.	18756.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
157731.	95145.	146524.	359399.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	40051.	11228.	23934.	95737.	13792.	4.
0. TO 10000.	7778.	1640.	3875.	61994.	2414.	16.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	358763.	107252.	192144.	1729294.	80673.	9.
0. TO 100000.	90385.	38154.	59031.	649336.	20476.	11.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	7.	5.	231.	56.	8.	140.	0.	53.	0.	0.	0.	0.
MIN	0.	0.	20.	0.	0.	0.	0.	9.	0.	0.	0.	0.
AVE	7.	2.	82.	17.	8.	51.	0.	26.	0.	0.	0.	0.
TOT	7.	14.	738.	137.	8.	563.	0.	436.	0.	0.	0.	0.
SD	0.	1.	76.	21.	0.	36.	0.	15.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1.	1.	22.	8.	2.	11.	0.	2.	0.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	1.	0.	9.	2.	2.	3.	0.	1.	0.	0.	0.	0.
TOT	1.	3.	80.	20.	2.	31.	0.	22.	0.	0.	0.	0.
SD	0.	0.	11.	3.	0.	3.	0.	1.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

DISTRICT OF COLUMBIA
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 20

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	600.	40.	216.	4320.	170.
FLOW (MGY)	355.	7.	76.	1522.	96.
TOTAL CAPITAL COST	259728.	30523.	92682.	1853643.	63528.
TOTAL ANNUAL O&M COST	35198.	1640.	7458.	149162.	8878.
TOTAL ANNUAL COST	68184.	5517.	19229.	384575.	16730.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
149162.	92682.	142730.	384575.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	35198.	11228.	21792.	87169.	11298.	4.
0. TO 10000.	7778.	1640.	3875.	61994.	2414.	16.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	324660.	107252.	185302.	1667718.	67727.	9.
0. TO 100000.	90385.	38154.	59031.	649336.	20476.	11.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	7.	5.	211.	49.	8.	140.	0.	53.	0.	0.	0.	0.
MIN	0.	0.	20.	0.	0.	0.	0.	9.	0.	0.	0.	0.
AVE	7.	2.	78.	15.	8.	51.	0.	26.	0.	0.	0.	0.
TOT	7.	14.	702.	124.	8.	563.	0.	436.	0.	0.	0.	0.
SD	0.	1.	69.	18.	0.	36.	0.	15.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1.	1.	28.	7.	2.	11.	0.	2.	0.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	1.	0.	8.	2.	2.	3.	0.	1.	0.	0.	0.	0.
TOT	1.	3.	73.	18.	2.	31.	0.	22.	0.	0.	0.	0.
SD	0.	0.	10.	2.	0.	3.	0.	1.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

DISTRICT OF COLUMBIA
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 20

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	600.	40.	216.	4320.	170.
FLOW (MGY)	248.	7.	65.	1295.	69.
TOTAL CAPITAL COST	203386.	30523.	86656.	1733111.	51017.
TOTAL ANNUAL O&M COST	25585.	1640.	6498.	129965.	6415.
TOTAL ANNUAL COST	51415.	5517.	17504.	350070.	12663.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
129965.	86656.	133449.	350070.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	25585.	11228.	16993.	67972.	6924.	4.
0. TO 10000.	7778.	1640.	3875.	61994.	2414.	16.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	254233.	107252.	168561.	1517053.	41369.	9.
0. TO 100000.	90385.	38154.	59031.	649336.	20476.	11.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	7.	5.	169.	34.	8.	125.	0.	53.	0.	0.	0.	0.
MIN	0.	0.	20.	0.	0.	0.	0.	9.	0.	0.	0.	0.
AVE	7.	2.	70.	12.	8.	50.	0.	26.	0.	0.	0.	0.
TOT	7.	14.	626.	95.	8.	547.	0.	436.	0.	0.	0.	0.
SD	0.	1.	53.	12.	0.	33.	0.	15.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1.	1.	21.	5.	2.	9.	0.	2.	0.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	1.	0.	7.	2.	2.	3.	0.	1.	0.	0.	0.	0.
TOT	1.	3.	59.	14.	2.	29.	0.	22.	0.	0.	0.	0.
SD	0.	0.	7.	2.	0.	3.	0.	1.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

FLORIDA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 256

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	7500.	10.	420.	107534.	829.
FLOW (MGY)	81468.	11.	1790.	458206.	8168.
TOTAL CAPITAL COST	66683920.	26789.	1144018.	292868608.	5581069.
TOTAL ANNUAL OEM COST	3125120.	1212.	72468.	18551808.	291592.
TOTAL ANALAL COST	10224305.	4878.	217761.	55746768.	977193.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
18591808.	14643429.	22550864.	55746096.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3125120.	604990.	1351079.	12159713.	849162.	9.
100000. TO 500000.	326339.	100263.	200202.	3203237.	75238.	16.
50000. TO 100000.	91756.	51735.	70454.	774991.	13744.	11.
10000. TO 50000.	47156.	10241.	20094.	1788338.	9117.	89.
0. TO 10000.	9906.	1212.	4779.	626103.	2404.	131.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	83354896.	5560183.	24949520.	274444800.	24409360.	11.
1000000. TO 5000000.	4843651.	1011149.	2209197.	35347152.	1355703.	16.
500000. TO 1000000.	997063.	509285.	669975.	20769216.	150869.	31.
100000. TO 500000.	498135.	102134.	222174.	31326464.	99954.	141.
0. TO 100000.	99055.	33486.	73827.	4208138.	19759.	57.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	37601.	4064.	2230.	21509.	100.	8209.	63.	6205.	9.	0.	11589.	25427.
MIN	0.	2.	0.	0.	8.	0.	0.	12.	1.	0.	0.	0.
AVE	4735.	68.	159.	525.	26.	429.	45.	286.	3.	0.	7702.	12975.
TOT	37881.	11208.	19093.	70313.	1072.	54086.	446.	49557.	165.	0.	23105.	25950.
SD	13280.	346.	243.	2323.	21.	968.	11.	812.	2.	0.	3470.	17610.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	443.	90.	441.	695.	150.	2045.	8.	335.	3.	0.	1015.	807.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	63.	1.	20.	21.	17.	57.	3.	10.	1.	0.	680.	413.
TOT	501.	223.	2393.	2766.	693.	7228.	35.	1815.	34.	0.	2040.	826.
SD	154.	4.	48.	73.	31.	211.	2.	38.	1.	0.	299.	558.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

FLORIDA

FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 256

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	7500.	10.	420.	107534.	829.
FLOW (MGY)	81468.	7.	1329.	340221.	6350.
TOTAL CAPITAL COST	66683920.	21174.	980896.	251109488.	5181123.
TOTAL ANNUAL O&M COST	3125120.	1173.	59499.	15231727.	256611.
TOTAL ANNUAL COST	10224305.	3862.	184069.	47121696.	891390.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
15231727.	12555473.	19335408.	47122608.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3125120.	506185.	1186376.	9491009.	899825.	8.
100000. TO 500000.	405213.	112620.	204414.	2861798.	84510.	14.
50000. TO 100000.	98445.	51380.	75118.	676062.	16916.	9.
10000. TO 50000.	44733.	10072.	19058.	1562719.	8934.	82.
0. TO 10000.	9808.	1173.	4477.	640192.	2273.	143.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	83354896.	5560183.	21404976.	235454736.	24391632.	11.
1000000. TO 5000000.	4843651.	1045030.	2055569.	26722400.	1166261.	13.
500000. TO 1000000.	963057.	502718.	683071.	15710634.	151216.	23.
100000. TO 500000.	481570.	102134.	222998.	30996720.	106464.	139.
0. TO 100000.	98351.	26467.	71475.	5003222.	19419.	70.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	37601.	4064.	2230.	21509.	99.	8209.	03.	6039.	8.	0.	7652.	25427.
MIN	0.	1.	0.	0.	8.	0.	0.	12.	0.	0.	0.	0.
AVE	4735.	65.	139.	412.	25.	373.	44.	235.	3.	0.	5085.	12975.
TOT	37879.	10804.	16697.	55182.	1029.	47021.	443.	40720.	129.	0.	15255.	25950.
SD	13280.	346.	232.	2041.	21.	922.	11.	657.	2.	0.	2291.	17610.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	443.	50.	441.	695.	148.	2045.	8.	335.	2.	0.	677.	807.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	63.	1.	17.	17.	16.	48.	3.	8.	0.	0.	453.	413.
TOT	500.	212.	1999.	2218.	667.	6003.	34.	1388.	23.	0.	1360.	826.
SD	154.	4.	45.	66.	31.	199.	2.	30.	0.	0.	199.	558.

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FLORIDA

FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 256

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	7500.	10.	420.	107534.	829.
FLOW (MGY)	65893.	5.	999.	255692.	5000.
TOTAL CAPITAL COST	41356960.	14719.	751196.	192306176.	3652308.
TOTAL ANNUAL O&M COST	2604477.	990.	46821.	11986140.	208651.
TOTAL ANNUAL COST	6857330.	3308.	142220.	36408368.	661137.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
11986140.	9615308.	14807568.	36409008.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2604477.	506198.	1143241.	6859450.	778210.	6.
100000. TO 500000.	413180.	124442.	224501.	2694008.	100852.	12.
50000. TO 100000.	94231.	52467.	69753.	697534.	14005.	10.
10000. TO 50000.	46566.	10117.	18419.	957776.	8213.	52.
0. TO 10000.	9875.	990.	4417.	777438.	2448.	176.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	51696192.	5604668.	20509888.	164079200.	17115792.	8.
1000000. TO 5000000.	4775635.	1078965.	2635790.	31629488.	1515102.	12.
500000. TO 1000000.	963547.	503460.	690351.	12426322.	159251.	18.
100000. TO 500000.	495417.	101215.	208580.	25863936.	100351.	124.
0. TO 100000.	99632.	18399.	67923.	6384781.	21311.	94.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	19456.	3469.	1767.	17450.	81.	7299.	57.	5269.	6.	0.	6364.	19112.
MIN	0.	1.	0.	0.	7.	0.	0.	7.	0.	0.	0.	0.
AVE	2457.	54.	107.	321.	20.	321.	40.	195.	2.	0.	4229.	9753.
TOT	19657.	8892.	12894.	43060.	821.	40493.	400.	33790.	104.	0.	12688.	19505.
SD	6869.	295.	186.	1643.	17.	814.	10.	563.	1.	0.	1905.	13236.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	329.	42.	318.	574.	103.	1717.	6.	271.	1.	0.	565.	611.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	46.	1.	12.	13.	11.	39.	3.	6.	0.	0.	379.	313.
TOT	371.	182.	1421.	1744.	454.	4898.	27.	1110.	18.	0.	1136.	625.
SD	114.	4.	33.	54.	21.	167.	2.	24.	0.	0.	167.	422.

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GEORGIA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 421

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36000.	15.	568.	238919.	2160.
FLOW (MGY)	38367.	6.	628.	264213.	2747.
TOTAL CAPITAL COST	20772928.	20092.	372291.	156734704.	1196155.
TOTAL ANNUAL O&M COST	1198482.	1020.	24658.	10380879.	80420.
TOTAL ANNUAL COST	3836643.	3572.	71937.	30285376.	230786.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
10380879.	7836734.	12068566.	30286160.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1198482.	507275.	852878.	1705756.	488757.	2.
100000. TO 500000.	492057.	111816.	245968.	3689521.	127604.	15.
50000. TO 100000.	96789.	50933.	74033.	814367.	18836.	11.
10000. TO 50000.	49678.	10071.	20724.	2735587.	10130.	132.
0. TO 10000.	9841.	1020.	5501.	1435697.	2259.	261.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	25966160.	5868183.	10576585.	52882928.	8621538.	5.
1000000. TO 5000000.	4954611.	1032376.	2150283.	49456512.	1217968.	23.
500000. TO 1000000.	997063.	500590.	729350.	21151136.	154150.	29.
100000. TO 500000.	494491.	100619.	225926.	6777856.	96055.	300.
0. TO 100000.	39651.	25115.	72672.	4651022.	21575.	64.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	728.	237.	1008.	6821.	122.	2641.	40.	3945.	21.	C.	7366.	722.
MIN	0.	1.	0.	0.	8.	0.	0.	11.	0.	0.	0.	0.
AVE	154.	15.	113.	78.	22.	158.	34.	146.	4.	0.	7366.	722.
TOT	1695.	3592.	23233.	23693.	1448.	48020.	235.	46406.	322.	0.	7366.	722.
SD	263.	29.	148.	434.	16.	349.	4.	335.	4.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	80.	5.	203.	121.	104.	344.	2.	128.	8.	0.	603.	23.
MIN	0.	C.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	16.	1.	11.	4.	8.	16.	2.	4.	1.	C.	603.	23.
TOT	172.	149.	2238.	1283.	541.	3929.	11.	1370.	63.	0.	603.	23.
SD	24.	0.	23.	14.	14.	48.	0.	12.	1.	C.	0.	0.

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GEORGIA
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 421

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36000.	15.	568.	238919.	2160.
FLOW (MGY)	20136.	4.	416.	175240.	1473.
TOTAL CAPITAL COST	12928041.	14615.	300838.	126652624.	768214.
TOTAL ANNUAL O&M COST	742169.	718.	18762.	7898979.	51275.
TOTAL ANNUAL COST	2384028.	2574.	56967.	23983104.	147581.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
7898979.	6332630.	9752247.	23983856.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	742169.	742169.	742169.	742169.	0.	1.
100000. TO 500000.	335901.	100491.	203367.	2440407.	79097.	12.
50000. TO 100000.	94026.	50691.	73867.	886403.	16737.	12.
10000. TO 50000.	49678.	10181.	20232.	2367145.	9701.	117.
0. TO 10000.	9884.	718.	5243.	1462904.	2312.	279.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	16160051.	16160051.	16160051.	16160051.	0.	1.
1000000. TO 5000000.	4672758.	1004533.	2218278.	53238672.	1245968.	24.
500000. TO 1000000.	986104.	500590.	722910.	19518560.	139359.	27.
100000. TO 500000.	493810.	100619.	226605.	62769568.	95595.	277.
0. TO 100000.	99651.	18269.	72067.	6630155.	21730.	92.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	728.	227.	1008.	3611.	107.	1848.	40.	2606.	20.	0.	4864.	722.
MIN	0.	1.	0.	0.	8.	0.	0.	10.	0.	0.	0.	0.
AVE	132.	13.	100.	49.	20.	169.	33.	120.	3.	0.	4864.	722.
TOT	1456.	3145.	20627.	14996.	1341.	40841.	234.	38157.	269.	0.	4864.	722.
SD	233.	26.	135.	233.	14.	245.	4.	225.	3.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	80.	5.	203.	102.	83.	202.	2.	70.	5.	0.	402.	23.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	14.	1.	9.	3.	7.	12.	2.	3.	1.	0.	402.	23.
TOT	159.	139.	1895.	902.	472.	2802.	11.	1046.	49.	0.	402.	23.
SD	23.	0.	20.	9.	11.	28.	0.	7.	1.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

GEORGIA
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 421

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36000.	15.	568.	238919.	2160.
FLOW (MGY)	15121.	3.	299.	125882.	1087.
TOTAL CAPITAL COST	10512105.	10489.	246116.	103614816.	619718.
TOTAL ANNUAL O&M COST	601655.	616.	14120.	5944542.	39611.
TOTAL ANNUAL COST	1936692.	2220.	45376.	19103296.	117548.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
5944542.	5180740.	7978336.	19103616.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	601655.	601655.	601655.	601655.	0.	1.
100000. TO 500000.	248852.	103176.	183267.	1466137.	52158.	8.
50000. TO 100000.	94026.	52230.	70393.	563144.	17339.	8.
10000. TO 50000.	48824.	10136.	18905.	1852738.	9010.	98.
0. TO 10000.	9913.	616.	4774.	1460925.	2281.	306.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	13140131.	13140131.	13140131.	13140131.	0.	1.
1000000. TO 5000000.	3843687.	1007220.	2120904.	36055376.	1004566.	17.
500000. TO 1000000.	965648.	520685.	686437.	16474492.	136165.	24.
100000. TO 500000.	490299.	100575.	216873.	55519408.	92905.	256.
0. TO 100000.	99649.	13112.	67727.	8330376.	22136.	123.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	459.	227.	878.	2723.	72.	1577.	36.	2167.	9.	0.	4045.	543.
MIN	0.	1.	0.	0.	5.	0.	0.	5.	0.	0.	0.	0.
AVE	70.	10.	76.	35.	16.	149.	30.	100.	3.	0.	4045.	543.
TOT	770.	2339.	15640.	10753.	1062.	36147.	211.	31901.	204.	0.	4045.	543.
SD	135.	21.	101.	175.	10.	209.	4.	184.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	60.	8.	149.	78.	40.	160.	2.	54.	2.	0.	336.	18.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	9.	1.	6.	2.	4.	10.	1.	3.	0.	0.	336.	18.
TOT	101.	120.	1217.	651.	294.	2305.	9.	863.	32.	0.	336.	18.
SD	17.	0.	14.	6.	6.	22.	0.	5.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

IDAHO
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 53

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2400.	21.	235.	12479.	351.
FLOW (MGY)	13203.	19.	970.	51412.	2056.
TOTAL CAPITAL COST	11261C84.	47198.	862446.	45709616.	1599017.
TOTAL ANNUAL C&M COST	703117.	2047.	54023.	2863240.	103679.
TOTAL ANNUAL COST	2133273.	8041.	163554.	8668369.	304994.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2863240.	2285480.	3519638.	8668358.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	703117.	703117.	703117.	703117.	0.	1.
100000. TO 500000.	219773.	103672.	139494.	1255446.	45611.	9.
50000. TO 100000.	62078.	57077.	59578.	119155.	3536.	2.
10000. TO 50000.	40752.	11116.	24835.	720229.	8677.	29.
0. TO 10000.	8250.	2047.	5442.	65302.	1999.	12.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	14076355.	14076355.	14076355.	14076355.	0.	1.
1000000. TO 5000000.	3852821.	1052527.	2213683.	22136832.	958554.	10.
500000. TO 1000000.	976015.	540024.	731121.	16815792.	138336.	23.
100000. TO 500000.	486911.	100986.	234507.	3986611.	129149.	17.
0. TO 100000.	62579.	58998.	60788.	121577.	2533.	2.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	334.	227.	629.	2913.	109.	1727.	60.	2345.	6.	0.	4377.	0.
MIN	0.	8.	0.	0.	16.	0.	0.	20.	3.	0.	0.	0.
AVE	334.	67.	217.	265.	41.	440.	60.	289.	5.	0.	4377.	0.
TOT	334.	1884.	3038.	6893.	284.	14949.	60.	13867.	23.	0.	4377.	0.
SD	0.	67.	231.	549.	37.	346.	0.	381.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	30.	4.	97.	90.	85.	154.	5.	62.	1.	0.	398.	0.
MIN	0.	1.	0.	0.	3.	0.	0.	1.	0.	0.	0.	0.
AVE	30.	2.	26.	13.	27.	33.	5.	8.	1.	0.	398.	0.
TOT	30.	45.	367.	347.	188.	1112.	5.	368.	4.	0.	398.	0.
SD	0.	1.	35.	18.	38.	36.	0.	11.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

IDAHO
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 53

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2400.	21.	235.	12479.	351.
FLOW (MGY)	5656.	9.	484.	25660.	921.
TOTAL CAPITAL COST	6196045.	29579.	556523.	29495696.	922777.
TOTAL ANNUAL O&M COST	382099.	1251.	32477.	1721273.	58999.
TOTAL ANNUAL COST	1168996.	5008.	103155.	5467229.	175020.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1721273.	1474784.	2271167.	5467224.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	382099.	170618.	276358.	552717.	149580.	2.
50000. TO 100000.	90384.	73636.	80342.	642732.	5056.	8.
10000. TO 50000.	43059.	10055.	18424.	405334.	8871.	22.
0. TO 10000.	8994.	1251.	5738.	120494.	2881.	21.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	7745056.	7745056.	7745056.	7745056.	0.	1.
1000000. TO 5000000.	2763406.	1184150.	1910216.	13371517.	486226.	7.
500000. TO 1000000.	905178.	520038.	697999.	6979994.	133442.	10.
100000. TO 500000.	490012.	101129.	289621.	8399009.	119129.	29.
0. TO 100000.	82818.	36974.	62361.	374165.	19640.	6.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	247.	175.	538.	1220.	97.	1080.	49.	1360.	5.	0.	2537.	0.
MIN	0.	6.	0.	0.	13.	0.	0.	12.	3.	0.	0.	0.
AVE	247.	50.	161.	132.	33.	303.	49.	188.	3.	0.	2537.	0.
TOT	247.	1402.	2251.	3423.	230.	10314.	49.	9025.	17.	0.	2537.	0.
SD	0.	51.	190.	245.	32.	246.	0.	238.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	24.	3.	70.	42.	65.	77.	3.	30.	1.	0.	234.	0.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	24.	1.	17.	7.	18.	19.	3.	5.	0.	0.	234.	0.
TOT	24.	37.	243.	182.	123.	645.	3.	227.	2.	0.	234.	0.
SD	0.	1.	25.	9.	26.	20.	0.	6.	0.	0.	0.	0.

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IDAHO
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 53

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2400.	21.	235.	12479.	351.
FLOW (MGY)	4248.	7.	344.	18256.	661.
TOTAL CAPITAL COST	5082060.	25483.	452622.	23988992.	738586.
TOTAL ANNUAL O&M COST	311832.	1081.	24412.	1293845.	45306.
TOTAL ANNUAL COST	957253.	4317.	81895.	4340449.	138540.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1293845.	1199449.	1847151.	4340445.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	311832.	311832.	311832.	311832.	0.	1.
50000. TO 100000.	82270.	53030.	65654.	459580.	11771.	7.
10000. TO 50000.	41362.	10061.	19620.	372785.	9692.	19.
0. TO 10000.	9183.	1081.	5756.	149652.	2904.	26.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	6352575.	6352575.	6352575.	6352575.	0.	1.
1000000. TO 5000000.	1731346.	1442530.	1552809.	9316856.	125508.	6.
500000. TO 1000000.	927860.	555142.	700835.	4205008.	132343.	6.
100000. TO 500000.	476222.	114676.	322054.	9339560.	100942.	29.
0. TO 100000.	95501.	31854.	70212.	772329.	22686.	11.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	93.	132.	310.	920.	65.	922.	45.	1131.	4.	0.	2110.	0.
MIN	0.	4.	0.	0.	11.	0.	0.	10.	2.	0.	0.	0.
AVE	93.	37.	107.	95.	25.	266.	45.	157.	3.	0.	2110.	0.
TOT	93.	1042.	1497.	2458.	177.	9036.	45.	7519.	14.	0.	2110.	0.
SD	0.	37.	112.	182.	21.	204.	0.	188.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	12.	2.	35.	32.	31.	60.	2.	24.	1.	0.	195.	0.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	12.	1.	9.	5.	10.	15.	2.	4.	0.	0.	195.	0.
TOT	12.	31.	131.	134.	73.	526.	2.	188.	2.	0.	195.	0.
SD	0.	1.	12.	7.	14.	16.	0.	4.	0.	0.	0.	0.

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ILLINOIS
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 951

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20000.	5.	697.	662976.	1587.
FLOW (MGY)	47041.	0.	479.	455108.	2222.
TOTAL CAPITAL COST	45819376.	3339.	427168.	406236672.	1988158.
TOTAL ANNUAL O&M COST	3548251.	304.	38501.	36614064.	162393.
TOTAL ANNUAL COST	9367310.	728.	92757.	88211904.	406805.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
36614064.	20311824.	31280208.	88206096.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3548251.	621094.	1243618.	13679802.	850086.	11.
100000. TO 500000.	354642.	100704.	185095.	7773994.	74362.	42.
50000. TO 100000.	99715.	50403.	71010.	4473608.	14757.	63.
10000. TO 50000.	45513.	10020.	20953.	8297369.	10166.	396.
0. TO 10000.	9955.	304.	5451.	2392838.	2430.	439.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	57274208.	5044770.	15127644.	181531728.	16510198.	12.
1000000. TO 5000000.	4763163.	1030945.	1983674.	128938832.	992792.	65.
500000. TO 1000000.	983634.	505399.	701944.	56857456.	133930.	81.
100000. TO 500000.	497554.	100118.	216289.	125447888.	97837.	580.
0. TO 100000.	95947.	4174.	70820.	15084622.	21629.	213.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	32974.	1378.	5042.	4943.	129.	1335.	41.	1484.	35.	0.	0.	16737.
MIN	0.	0.	0.	0.	5.	0.	0.	7.	0.	0.	0.	0.
AVE	856.	27.	171.	61.	26.	158.	37.	139.	4.	0.	0.	2698.
TOT	73453.	19093.	110531.	44149.	2637.	55459.	183.	58941.	1355.	0.	0.	40476.
SD	3988.	77.	327.	244.	24.	191.	3.	208.	4.	0.	0.	4120.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	745.	34.	2256.	421.	166.	157.	3.	93.	16.	0.	0.	607.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	45.	1.	28.	6.	15.	12.	2.	5.	1.	0.	0.	102.
TOT	3681.	824.	17845.	4424.	1495.	4358.	10.	2083.	364.	0.	0.	1532.
SD	105.	2.	119.	21.	29.	24.	0.	9.	2.	0.	0.	149.

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ILLINOIS
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 951

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20000.	5.	697.	662976.	1587.
FLOW (MGY)	24526.	0.	370.	352345.	1533.
TOTAL CAPITAL COST	29435008.	3339.	342300.	325527296.	1281037.
TOTAL ANNUAL O&M COST	1993897.	304.	30141.	28663648.	110362.
TOTAL ANNUAL COST	4949958.	728.	73619.	70011280.	262960.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
28663648.	16276363.	25065584.	70005584.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1993897.	507291.	947087.	9470867.	443339.	10.
100000. TO 500000.	354642.	100538.	169779.	6112043.	75814.	36.
50000. TO 100000.	99528.	50403.	70309.	3726364.	14975.	53.
10000. TO 50000.	49121.	10103.	20043.	6714246.	9937.	335.
0. TO 10000.	9819.	304.	5113.	2643520.	2296.	517.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	36793760.	5044770.	10721575.	117937328.	10021066.	11.
1000000. TO 5000000.	4750880.	1003880.	1959947.	111717008.	1014699.	57.
500000. TO 1000000.	994699.	508719.	710217.	49004992.	148654.	69.
100000. TO 500000.	497849.	100151.	204967.	108632576.	95045.	530.
0. TO 100000.	99897.	4174.	69302.	19681840.	21535.	284.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	11112.	847.	3309.	2601.	129.	1335.	41.	1322.	35.	0.	0.	15949.
MIN	0.	0.	0.	0.	5.	0.	0.	7.	0.	0.	0.	0.
AVE	466.	21.	140.	45.	25.	147.	37.	130.	3.	0.	0.	2601.
TOT	38220.	15143.	90258.	32681.	2557.	51349.	183.	55053.	1118.	0.	0.	39010.
SD	1711.	55.	250.	152.	24.	187.	3.	194.	4.	0.	0.	3924.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	436.	21.	1251.	234.	161.	197.	3.	70.	13.	0.	0.	580.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	34.	1.	20.	5.	14.	11.	2.	4.	1.	0.	0.	99.
TOT	2758.	707.	12880.	3293.	1417.	3938.	10.	1906.	278.	0.	0.	1479.
SD	69.	1.	76.	14.	28.	23.	0.	7.	1.	0.	0.	142.

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ILLINOIS
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 951

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20000.	5.	697.	662976.	1587.
FLOW (MGY)	17080.	0.	263.	250449.	979.
TOTAL CAPITAL COST	19877504.	2673.	270362.	257113824.	886382.
TOTAL ANNUAL O&M COST	1449448.	283.	22692.	21579664.	78020.
TOTAL ANNUAL COST	3426147.	622.	57027.	54232288.	184383.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
21579664.	12855690.	19797744.	54233088.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1449448.	534242.	775217.	5426516.	323377.	7.
100000. TO 500000.	370359.	106490.	187658.	4879103.	77331.	26.
50000. TO 100000.	99528.	50403.	72114.	3028769.	13980.	42.
10000. TO 50000.	49688.	10064.	19862.	5243623.	9657.	264.
0. TO 10000.	9993.	283.	4910.	3004805.	2409.	612.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	24846880.	5116908.	10472565.	62835392.	7865074.	6.
1000000. TO 5000000.	4423065.	1030344.	2037313.	101865696.	977955.	50.
500000. TO 1000000.	983634.	506635.	697082.	41127840.	155838.	59.
100000. TO 500000.	493243.	100162.	194924.	90639712.	88206.	465.
0. TO 100000.	99465.	3342.	67188.	24926928.	22138.	371.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	6066.	647.	2622.	1821.	91.	1335.	39.	1126.	23.	0.	0.	11988.
MIN	0.	0.	0.	0.	5.	0.	0.	6.	0.	0.	0.	0.
AVE	276.	17.	112.	33.	20.	134.	34.	107.	2.	0.	0.	2104.
TOT	22618.	11777.	72158.	23666.	1993.	46732.	168.	45536.	901.	0.	0.	31560.
SD	947.	43.	191.	104.	16.	181.	4.	156.	3.	0.	0.	2957.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	324.	16.	902.	169.	84.	197.	2.	44.	7.	0.	0.	439.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	25.	1.	14.	3.	8.	10.	2.	8.	1.	0.	0.	81.
TOT	2057.	613.	9123.	2451.	834.	3527.	8.	1554.	206.	0.	0.	1208.
SD	52.	1.	52.	10.	14.	22.	0.	6.	1.	0.	0.	108.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

INDIANA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 515

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20500.	11.	863.	444594.	1983.
FLOW (MGY)	56435.	2.	792.	408039.	6214.
TOTAL CAPITAL COST	150539616.	11838.	975750.	502511360.	8884757.
TOTAL ANNUAL O&M COST	6808742.	756.	63662.	32786144.	447207.
TOTAL ANNUAL COST	25927248.	2259.	187590.	96608976.	1569758.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
32786144.	25125552.	38693344.	96605040.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	6808742.	666754.	2983595.	20885168.	2627760.	7.
100000. TO 500000.	474971.	101894.	181082.	3983813.	86246.	22.
50000. TO 100000.	92225.	52327.	69487.	1876162.	12333.	27.
10000. TO 50000.	49451.	10030.	20637.	4725907.	10357.	229.
0. TO 10000.	5554.	756.	5725.	1316856.	2499.	230.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	188174512.	5085295.	52586256.	473276416.	69941584.	9.
1000000. TO 5000000.	3856153.	1040946.	1798038.	46749008.	844014.	26.
500000. TO 1000000.	988624.	502061.	678388.	31884224.	139381.	47.
100000. TO 500000.	498353.	100153.	210067.	68901952.	94627.	328.
0. TO 100000.	99775.	14797.	70165.	7367333.	21725.	105.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	127753.	2354.	8050.	10028.	109.	836.	42.	2354.	28.	4394.	0.	13654.
MIN	0.	1.	0.	0.	6.	0.	0.	8.	0.	0.	0.	0.
AVE	8688.	38.	201.	103.	24.	125.	32.	129.	4.	4394.	0.	3058.
TOT	286718.	14827.	75172.	43074.	830.	25660.	194.	26368.	837.	4394.	0.	24465.
SD	28270.	183.	657.	717.	20.	116.	5.	268.	4.	0.	0.	4366.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1363.	59.	4390.	813.	95.	153.	3.	183.	12.	8.	0.	505.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	142.	2.	90.	10.	12.	9.	2.	6.	1.	8.	0.	117.
TOT	4684.	585.	18822.	4131.	394.	1805.	10.	1152.	260.	8.	0.	937.
SD	336.	5.	335.	59.	17.	14.	0.	19.	2.	0.	0.	160.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

INDIANA
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 515

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20500.	11.	863.	444594.	1983.
FLOW (MGY)	50279.	2.	498.	256386.	3329.
TOTAL CAPITAL COST	50768256.	9206.	511937.	263647808.	3217268.
TOTAL ANNUAL O&M COST	3813776.	600.	42621.	21949936.	256794.
TOTAL ANNUAL COST	10261343.	1769.	107638.	55433664.	661466.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
21949936.	13182389.	20300864.	55433184.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3813776.	666754.	1835718.	12850031.	1331196.	7.
100000. TO 500000.	269957.	106126.	160004.	2240052.	50122.	14.
50000. TO 100000.	97150.	53231.	75439.	1433335.	13093.	19.
10000. TO 50000.	49894.	10044.	20509.	3835232.	10195.	187.
0. TO 10000.	9994.	600.	5532.	1593243.	2341.	288.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	63460320.	5239353.	24304336.	194434720.	22901088.	8.
1000000. TO 5000000.	4832921.	1052456.	1889197.	39673152.	1000358.	21.
500000. TO 1000000.	927960.	511165.	691949.	24218208.	133596.	35.
100000. TO 500000.	488730.	100205.	200115.	60835088.	93195.	304.
0. TO 100000.	99985.	11508.	70752.	10400600.	21757.	147.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	37230.	1448.	5265.	5278.	105.	836.	40.	1548.	28.	4394.	0.	13012.
MIN	0.	0.	0.	0.	6.	0.	0.	8.	0.	0.	0.	0.
AVE	2814.	27.	152.	63.	24.	116.	32.	114.	3.	4394.	0.	2938.
TOT	92867.	10621.	56988.	26446.	820.	23917.	192.	23255.	639.	4394.	0.	23505.
SD	8336.	115.	443.	385.	19.	116.	4.	192.	3.	0.	0.	4150.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	797.	36.	2428.	452.	87.	153.	2.	100.	10.	8.	0.	482.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	92.	1.	31.	6.	11.	8.	2.	4.	1.	8.	0.	113.
TOT	3035.	463.	11763.	2671.	380.	1640.	10.	904.	176.	8.	0.	902.
SD	197.	3.	188.	34.	16.	14.	0.	10.	1.	0.	0.	152.

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INDIANA
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 515

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20500.	11.	863.	444594.	1983.
FLOW (MGY)	35015.	1.	366.	188724.	2337.
TOTAL CAPITAL COST	29633344.	7416.	370159.	190632128.	1948985.
TOTAL ANNUAL O&M COST	2767396.	502.	32574.	16775539.	187291.
TOTAL ANNUAL COST	6530829.	1444.	79581.	40984416.	431649.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
16775539.	9531605.	14678666.	40985792.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2767396.	511689.	1493606.	8961636.	958100.	6.
100000. TO 500000.	486345.	105725.	160666.	1927994.	105778.	12.
50000. TO 100000.	90298.	50885.	73731.	1032230.	12158.	14.
10000. TO 50000.	48476.	10039.	20241.	3258777.	10368.	161.
0. TO 10000.	9964.	502.	4953.	1594980.	2230.	322.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	37041680.	5202102.	19127696.	114766240.	13018706.	6.
1000000. TO 5000000.	4167848.	1047981.	1905564.	38111280.	959115.	20.
500000. TO 1000000.	987378.	511165.	709644.	19870032.	144617.	28.
100000. TO 500000.	487439.	100077.	197662.	52380304.	92900.	265.
0. TO 100000.	99775.	9270.	67166.	13164622.	20985.	196.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	19483.	1105.	4164.	3695.	70.	741.	36.	1227.	28.	3527.	0.	9780.
MIN	0.	0.	0.	0.	6.	0.	0.	8.	0.	0.	0.	0.
AVE	1612.	22.	124.	46.	22.	108.	31.	102.	2.	3527.	0.	2325.
TOT	49898.	8387.	46515.	19239.	762.	22232.	189.	20767.	519.	3527.	0.	18597.
SD	4377.	88.	352.	272.	15.	111.	3.	155.	3.	0.	0.	3071.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	592.	27.	1749.	327.	42.	127.	2.	72.	10.	7.	0.	365.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	69.	1.	23.	5.	9.	7.	2.	4.	1.	7.	0.	90.
TOT	2271.	397.	8664.	2002.	314.	1479.	9.	778.	133.	7.	0.	721.
SD	146.	2.	136.	25.	10.	12.	0.	8.	1.	0.	0.	113.

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IOWA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 187

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	11500.	9.	604.	112959.	1225.
FLOW (MGY)	7443.	4.	317.	59368.	705.
TOTAL CAPITAL COST	4213292.	25344.	270757.	50631488.	455502.
TOTAL ANNUAL O&M COST	386960.	1345.	22352.	4179788.	38091.
TOTAL ANNUAL COST	922048.	4923.	56738.	10610085.	94172.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4179788.	2531574.	3898622.	10609984.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	386960.	111458.	156646.	1253171.	93612.	8.
50000. TO 100000.	93212.	50201.	64518.	903247.	14363.	14.
10000. TO 50000.	48046.	10011.	21991.	1605376.	9821.	73.
0. TO 10000.	9362.	1345.	4544.	418040.	2460.	92.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	5266615.	5266615.	5266615.	5266615.	0.	1.
1000000. TO 5000000.	3517505.	1009335.	1562841.	21879776.	713973.	14.
500000. TO 1000000.	930334.	518644.	732227.	8054495.	155754.	11.
100000. TO 500000.	494909.	101375.	234382.	24375680.	100542.	104.
0. TO 100000.	98967.	31680.	65151.	3713621.	21206.	57.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	733.	347.	889.	754.	137.	968.	41.	1433.	37.	0.	0.	0.
MIN	0.	0.	0.	0.	3.	0.	0.	7.	0.	0.	0.	0.
AVE	222.	33.	112.	44.	35.	192.	39.	147.	7.	0.	0.	0.
TOT	887.	3808.	12447.	4853.	1260.	10365.	79.	17230.	503.	0.	0.	0.
SD	345.	54.	124.	96.	25.	217.	2.	217.	8.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	54.	6.	99.	38.	146.	86.	3.	46.	14.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	23.	1.	12.	4.	21.	14.	3.	5.	2.	0.	0.	0.
TOT	92.	138.	1326.	192.	765.	763.	5.	593.	146.	0.	0.	0.
SD	25.	1.	12.	6.	28.	18.	0.	7.	3.	0.	0.	0.

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IOWA

FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 187

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	11500.	9.	604.	112959.	1225.
FLOW (MGY)	7443.	4.	265.	49597.	660.
TOTAL CAPITAL COST	4213292.	19440.	239779.	44838624.	437889.
TOTAL ANNUAL O&M COST	386960.	1196.	19195.	3589417.	36004.
TOTAL ANNUAL COST	922048.	3665.	49647.	9284000.	90046.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
3589417.	2241931.	3452572.	9283920.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	386960.	100160.	162269.	973611.	111046.	6.
50000. TO 100000.	89676.	50727.	66358.	729939.	13599.	11.
10000. TO 50000.	47866.	10205.	21260.	1424439.	10365.	67.
0. TO 10000.	9766.	1196.	4480.	461463.	2493.	103.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	5266615.	5266615.	5266615.	5266615.	0.	1.
1000000. TO 5000000.	3517505.	1005819.	1610044.	16100441.	812584.	10.
500000. TO 1000000.	968058.	516093.	728126.	9465632.	169239.	13.
100000. TO 500000.	499856.	100437.	219101.	20814560.	93012.	95.
0. TO 100000.	99722.	24300.	64734.	4401936.	20984.	68.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	733.	331.	889.	754.	137.	968.	41.	1433.	30.	0.	0.	0.
MIN	0.	0.	0.	0.	3.	0.	0.	7.	0.	0.	0.	0.
AVE	221.	29.	102.	38.	31.	173.	39.	127.	6.	0.	0.	0.
TOT	883.	3275.	11269.	3555.	1115.	9363.	79.	14891.	409.	0.	0.	0.
SD	345.	51.	120.	94.	24.	207.	2.	199.	6.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	54.	5.	99.	38.	146.	82.	3.	46.	11.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	23.	1.	10.	4.	18.	12.	3.	4.	2.	0.	0.	0.
TOT	91.	124.	1159.	339.	633.	655.	5.	473.	112.	0.	0.	0.
SD	25.	1.	16.	5.	26.	17.	0.	6.	2.	0.	0.	0.

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IOWA

FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 187

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	11500.	9.	604.	112959.	1225.
FLOW (MGY)	3386.	4.	189.	35252.	377.
TOTAL CAPITAL COST	2264601.	16776.	191173.	35749264.	290067.
TOTAL ANNUAL O&M COST	199193.	1018.	14811.	2769738.	23299.
TOTAL ANNUAL COST	486797.	3149.	39091.	7309948.	58608.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2769738.	1787463.	2752691.	7309892.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	199193.	110079.	154636.	309272.	63013.	2.
50000. TO 100000.	97056.	52632.	68814.	825767.	16603.	12.
10000. TO 50000.	45604.	10044.	20134.	1127497.	9214.	56.
0. TO 10000.	9883.	1018.	4335.	507242.	2582.	117.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2830751.	1118142.	1806214.	10837288.	643382.	6.
500000. TO 1000000.	978959.	533913.	771348.	10798877.	157727.	14.
100000. TO 500000.	492736.	100410.	208282.	18120512.	91493.	87.
0. TO 100000.	98312.	20970.	61633.	4930671.	21696.	80.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	267.	276.	543.	347.	96.	780.	38.	864.	25.	0.	0.	0.
MIN	0.	0.	0.	0.	3.	0.	0.	7.	0.	0.	0.	0.
AVE	99.	22.	85.	26.	26.	144.	37.	100.	5.	0.	0.	0.
TOT	397.	2537.	9464.	2447.	948.	7783.	75.	11758.	341.	0.	0.	0.
SD	121.	38.	92.	49.	19.	164.	1.	144.	5.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	28.	5.	70.	20.	76.	67.	3.	24.	8.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	15.	1.	8.	3.	13.	9.	2.	3.	1.	0.	0.	0.
TOT	61.	108.	918.	262.	457.	500.	5.	372.	88.	0.	0.	0.
SD	15.	1.	13.	4.	16.	13.	0.	4.	2.	0.	0.	0.

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KANSAS
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 110

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	15000.	16.	577.	63445.	1708.
FLOW (MGY)	1954.	4.	239.	26276.	390.
TOTAL CAPITAL COST	2134905.	15855.	273552.	30090688.	399597.
TOTAL ANNUAL O&M COST	137611.	586.	22301.	2453064.	30741.
TOTAL ANNUAL COST	399661.	2999.	57042.	6274619.	78419.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2453064.	1504534.	2316981.	6274579.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	137611.	101396.	115471.	808298.	12972.	7.
50000. TO 100000.	93440.	53467.	76462.	458769.	13769.	6.
10000. TO 50000.	48264.	10510.	25078.	852658.	10878.	34.
0. TO 10000.	5689.	986.	5291.	333360.	2161.	63.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2656631.	1121717.	1751358.	15762228.	633079.	9.
500000. TO 1000000.	986690.	508609.	727978.	8007763.	175245.	11.
100000. TO 500000.	462718.	100142.	203425.	11595245.	102051.	57.
0. TO 100000.	98947.	15818.	68139.	2248573.	20637.	33.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	196.	85.	553.	143.	49.	481.	42.	352.	14.	0.	0.	1632.
MIN	0.	1.	0.	0.	0.	0.	0.	12.	0.	0.	0.	0.
AVE	68.	13.	119.	24.	10.	110.	41.	71.	3.	0.	0.	806.
TOT	1086.	877.	7750.	1732.	309.	3637.	83.	3952.	93.	0.	0.	10482.
SD	63.	15.	111.	33.	12.	114.	2.	76.	3.	0.	0.	499.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	31.	2.	118.	19.	51.	49.	4.	12.	4.	0.	0.	69.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	12.	1.	14.	3.	10.	7.	3.	2.	1.	0.	0.	34.
TOT	196.	52.	936.	201.	201.	242.	7.	139.	22.	0.	0.	447.
SD	10.	0.	22.	4.	14.	10.	0.	2.	1.	0.	0.	21.

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KANSAS

FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 110

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	15000.	16.	577.	63445.	1708.
FLOW (MGY)	1763.	4.	192.	21084.	296.
TOTAL CAPITAL COST	2134905.	15855.	251179.	27629696.	380695.
TOTAL ANNUAL O&M COST	128528.	986.	19058.	2096402.	25488.
TOTAL ANNUAL COST	399661.	2999.	50958.	5605412.	72165.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2096402.	1381484.	2127485.	5605371.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	128528.	109477.	117182.	351546.	10034.	3.
50000. TO 100000.	85678.	53467.	73461.	587687.	10895.	8.
10000. TO 50000.	46868.	10510.	24571.	810859.	10146.	33.
0. TO 10000.	9842.	986.	5247.	346332.	2267.	66.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2668631.	1121717.	1766053.	14128424.	606700.	8.
500000. TO 1000000.	986690.	508609.	718054.	6462485.	194117.	9.
100000. TO 500000.	434006.	101635.	203296.	11384587.	100119.	56.
0. TO 100000.	96961.	19818.	69245.	2562067.	19806.	37.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	196.	67.	394.	114.	46.	481.	41.	352.	11.	0.	0.	1632.
MIN	0.	1.	0.	0.	7.	0.	0.	12.	0.	0.	0.	0.
AVE	65.	11.	103.	19.	18.	103.	40.	65.	3.	0.	0.	782.
TOT	1039.	754.	6715.	1372.	373.	3413.	81.	3626.	85.	0.	0.	10172.
SD	61.	12.	77.	24.	12.	107.	2.	70.	3.	0.	0.	476.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	31.	2.	73.	11.	47.	49.	3.	12.	3.	0.	0.	69.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	12.	1.	11.	2.	9.	7.	3.	2.	1.	0.	0.	33.
TOT	189.	48.	704.	167.	179.	220.	6.	129.	19.	0.	0.	435.
SD	10.	0.	13.	2.	12.	9.	0.	2.	1.	0.	0.	20.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

KANSAS

FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 110

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	15000.	16.	577.	63445.	1708.
FLOW (MGY)	1187.	4.	145.	15941.	214.
TOTAL CAPITAL COST	2134905.	15855.	226429.	24907216.	371294.
TOTAL ANNUAL O&M COST	128528.	986.	15868.	1745461.	22788.
TOTAL ANNUAL COST	399661.	2999.	44625.	4908708.	69258.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1745461.	1245360.	1917854.	4908675.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	128528.	109477.	117182.	351546.	10034.	3.
50000. TO 100000.	79218.	53467.	62231.	311157.	9872.	5.
10000. TO 50000.	48426.	10393.	23866.	739841.	10793.	31.
0. TO 10000.	9720.	986.	4830.	342937.	2218.	71.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2668631.	1048803.	1695682.	13565459.	646379.	8.
500000. TO 1000000.	986690.	508609.	731748.	5122234.	188927.	7.
100000. TO 500000.	428768.	100411.	192135.	9222471.	91120.	48.
0. TO 100000.	97559.	19818.	68601.	3224251.	20113.	47.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	196.	62.	245.	95.	38.	433.	37.	311.	10.	0.	0.	1632.
MIN	0.	1.	0.	0.	5.	0.	0.	11.	0.	0.	0.	0.
AVE	63.	10.	86.	14.	16.	93.	36.	57.	3.	0.	0.	762.
TOT	1004.	650.	5587.	1033.	331.	3054.	73.	3190.	77.	0.	0.	9908.
SD	60.	11.	57.	18.	10.	97.	1.	63.	2.	0.	0.	469.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	31.	1.	29.	8.	33.	42.	3.	10.	3.	0.	0.	69.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	11.	1.	8.	2.	7.	6.	3.	2.	1.	0.	0.	33.
TOT	183.	44.	506.	126.	139.	187.	5.	114.	17.	0.	0.	425.
SD	10.	0.	7.	2.	9.	8.	0.	2.	1.	0.	0.	20.

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KENTUCKY
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 208

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10000.	15.	500.	103996.	987.
FLOW (MGY)	24191.	5.	387.	80420.	1910.
TOTAL CAPITAL COST	67004336.	19028.	620664.	129098064.	4705274.
TOTAL ANNUAL O&M COST	1909998.	852.	31605.	6573752.	151313.
TOTAL ANNUAL COST	10419546.	3269.	110427.	22968768.	740496.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
6573752.	6454902.	9940546.	22969200.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1909998.	914536.	1412267.	2824534.	703897.	2.
100000. TO 500000.	409570.	121019.	249092.	1245461.	125078.	5.
50000. TO 100000.	98149.	51805.	67681.	812175.	14794.	12.
10000. TO 50000.	46055.	10051.	20497.	1168335.	10053.	57.
0. TO 10000.	9659.	852.	3964.	523283.	2539.	132.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	83755408.	8902306.	34431808.	103295456.	42724272.	3.
1000000. TO 5000000.	4697895.	1092871.	2291284.	22912848.	1270850.	10.
500000. TO 1000000.	820315.	517233.	647892.	8422600.	101028.	13.
100000. TO 500000.	474888.	100153.	225807.	21451648.	104678.	95.
0. TO 100000.	99557.	23785.	60812.	5290651.	22530.	87.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	36891.	459.	2325.	1180.	55.	1221.	34.	1019.	10.	2519.	0.	26321.
MIN	0.	1.	0.	0.	8.	0.	0.	8.	1.	0.	0.	0.
AVE	2371.	25.	144.	55.	22.	113.	34.	79.	3.	2519.	0.	11029.
TOT	42682.	3505.	20574.	7100.	400.	9278.	34.	9784.	137.	2519.	0.	33086.
SD	8649.	62.	278.	157.	12.	169.	0.	133.	2.	0.	0.	13490.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	482.	11.	564.	106.	33.	100.	2.	25.	3.	5.	0.	881.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	55.	1.	19.	5.	8.	6.	2.	2.	1.	5.	0.	373.
TOT	992.	131.	2765.	591.	145.	504.	2.	291.	31.	5.	0.	1118.
SD	119.	1.	65.	12.	8.	13.	0.	4.	1.	0.	0.	449.

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KENTUCKY
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 208

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10000.	15.	500.	103996.	987.
FLOW (MGY)	24191.	5.	368.	76480.	1908.
TOTAL CAPITAL COST	67004336.	19028.	606560.	126164400.	4705349.
TOTAL ANNUAL O&M COST	1909998.	852.	30138.	6268607.	151282.
TOTAL ANNUAL COST	10419546.	3269.	107168.	22290976.	740518.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
6268607.	6308219.	9714658.	22291472.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1909998.	914536.	1412267.	2824534.	703897.	2.
100000. TO 500000.	409570.	172975.	281111.	1124443.	118425.	4.
50000. TO 100000.	98149.	51805.	69277.	762050.	15943.	11.
10000. TO 50000.	49985.	10051.	20179.	1008961.	10204.	50.
0. TO 10000.	9659.	852.	3891.	548663.	2419.	141.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	83755408.	8902306.	34431808.	103295456.	42724272.	3.
1000000. TO 5000000.	4697895.	1092871.	2215697.	22156976.	1255038.	10.
500000. TO 1000000.	820315.	517233.	644079.	7084855.	111886.	11.
100000. TO 500000.	468384.	101648.	215281.	19590608.	101037.	91.
0. TO 100000.	99557.	23785.	59982.	5578295.	21896.	93.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	36891.	459.	2325.	1180.	55.	1221.	34.	1019.	10.	2519.	0.	26321.
MIN	0.	1.	0.	0.	8.	0.	0.	8.	1.	0.	0.	0.
AVE	2370.	23.	134.	51.	22.	108.	34.	77.	2.	2519.	0.	11029.
TOT	42664.	3253.	19117.	6553.	400.	8838.	34.	9588.	113.	2519.	0.	33086.
SD	8649.	62.	278.	156.	12.	162.	0.	128.	2.	0.	0.	13490.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	482.	11.	564.	106.	33.	100.	2.	25.	2.	5.	0.	881.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	55.	1.	18.	4.	8.	6.	2.	2.	0.	5.	0.	373.
TOT	987.	123.	2578.	538.	145.	464.	2.	285.	23.	5.	0.	1118.
SD	119.	1.	65.	12.	8.	13.	0.	3.	1.	0.	0.	449.

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KENTUCKY
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 208

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10000.	15.	500.	103996.	987.
FLOW (MGY)	23582.	5.	322.	66901.	1764.
TOTAL CAPITAL COST	64726384.	19028.	565138.	117548672.	4532388.
TOTAL ANNUAL O&M COST	1870653.	852.	26878.	5590622.	141287.
TOTAL ANNUAL COST	10090902.	3269.	98648.	20518864.	711862.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
5590622.	5877433.	9051243.	20519296.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1870653.	666114.	1268383.	2536767.	851738.	2.
100000. TO 500000.	401225.	126765.	240189.	960758.	120362.	4.
50000. TO 100000.	98149.	53069.	65054.	520435.	14324.	8.
10000. TO 50000.	46574.	10051.	20849.	1042471.	10520.	50.
0. TO 10000.	9659.	852.	3682.	530235.	2282.	144.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	80907968.	6109412.	32471008.	97413024.	42002304.	3.
1000000. TO 5000000.	4413778.	1092871.	2013381.	18120432.	1116248.	9.
500000. TO 1000000.	946023.	517233.	681720.	6817201.	143171.	10.
100000. TO 500000.	454966.	102898.	219116.	18405744.	98591.	84.
0. TO 100000.	99835.	23785.	60590.	6180203.	22869.	102.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	35206.	412.	2288.	1021.	45.	1161.	34.	961.	10.	2022.	0.	25800.
MIN	0.	1.	0.	0.	8.	0.	0.	8.	1.	0.	0.	0.
AVE	2185.	20.	121.	44.	22.	103.	34.	72.	2.	2022.	0.	10810.
TOT	39322.	2882.	17358.	5571.	391.	8451.	34.	8985.	102.	2022.	0.	32430.
SD	8257.	54.	252.	131.	11.	152.	0.	116.	2.	0.	0.	13222.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	472.	9.	467.	76.	24.	93.	2.	21.	2.	4.	0.	864.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	49.	1.	15.	4.	8.	5.	2.	2.	0.	4.	0.	365.
TOT	882.	114.	2186.	455.	135.	431.	2.	265.	20.	4.	0.	1096.
SD	114.	1.	54.	9.	6.	11.	0.	3.	0.	0.	0.	440.

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LOUISIANA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 238

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5200.	6.	357.	84850.	624.
FLOW (MGY)	107829.	11.	2068.	492203.	8199.
TOTAL CAPITAL COST	45535856.	27913.	1630982.	388173824.	5217849.
TOTAL ANNUAL O&M COST	3247403.	1354.	110602.	26323296.	301816.
TOTAL ANNUAL COST	9030455.	4921.	317739.	75621904.	952270.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
26323296.	19408688.	29889360.	75621344.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3247403.	505459.	1160530.	12765832.	824924.	11.
100000. TO 500000.	469985.	103202.	221267.	9735755.	111781.	44.
50000. TO 100000.	95383.	53058.	72657.	2034385.	13264.	28.
10000. TO 50000.	48073.	10004.	21912.	1292820.	9958.	59.
0. TO 10000.	9882.	1354.	5159.	495290.	2032.	96.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	56915809.	5584322.	18241184.	328341504.	16745457.	18.
1000000. TO 5000000.	4989713.	1001878.	2133716.	115220672.	980283.	54.
500000. TO 1000000.	991593.	510403.	681668.	18405040.	156118.	27.
100000. TO 500000.	465354.	100121.	218184.	19636576.	90261.	90.
0. TO 100000.	99510.	34891.	73952.	3623662.	19805.	49.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	18152.	1146.	2764.	16877.	295.	4678.	53.	7664.	5.	6946.	14316.	18444.
MIN	0.	1.	0.	0.	4.	0.	0.	12.	1.	0.	0.	0.
AVE	1729.	110.	294.	363.	41.	535.	50.	354.	2.	6946.	14316.	4486.
TOT	62255.	16687.	35339.	68529.	1513.	62588.	151.	56979.	71.	6946.	14316.	62805.
SD	4641.	202.	425.	1492.	55.	754.	4.	794.	1.	0.	0.	6626.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	364.	16.	515.	566.	658.	827.	6.	435.	1.	11.	1420.	678.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	48.	2.	49.	18.	44.	64.	5.	13.	0.	11.	1420.	171.
TOT	1726.	335.	5854.	3375.	1637.	7456.	15.	2091.	14.	11.	1420.	2391.
SD	97.	3.	91.	49.	113.	124.	1.	41.	0.	0.	0.	248.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

LOUISIANA
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 238

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5200.	6.	357.	84850.	624.
FLOW (MGY)	56563.	6.	1195.	284373.	4387.
TOTAL CAPITAL COST	29376864.	19180.	1096427.	260949840.	3220046.
TOTAL ANNUAL O&M COST	1977976.	1204.	72307.	17209072.	192637.
TOTAL ANNUAL COST	5506287.	3640.	211549.	50348752.	595315.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
17209072.	13047491.	20093120.	50349680.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1977976.	584607.	981480.	6870359.	482102.	7.
100000. TO 500000.	459345.	102396.	208388.	6251633.	117465.	30.
50000. TO 100000.	95505.	50024.	69421.	2221476.	13988.	32.
10000. TO 50000.	49440.	10004.	20807.	1394088.	10105.	67.
0. TO 10000.	9993.	1204.	4625.	471778.	2135.	102.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	36721072.	5109412.	13152925.	197293888.	10221158.	15.
1000000. TO 5000000.	4989713.	1022953.	2052620.	84157456.	943913.	41.
500000. TO 1000000.	991593.	517203.	753335.	18080032.	171052.	24.
100000. TO 500000.	480902.	101174.	224308.	23103712.	100274.	103.
0. TO 100000.	97001.	23975.	64609.	3553507.	21331.	55.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	11879.	1045.	1609.	9994.	202.	3273.	38.	5062.	4.	6946.	9453.	15244.
MIN	0.	1.	0.	0.	4.	0.	0.	11.	0.	0.	0.	0.
AVE	728.	81.	180.	231.	27.	454.	36.	262.	2.	6946.	9453.	3159.
TOT	26194.	12371.	21564.	43721.	999.	53142.	107.	42174.	56.	6946.	9453.	44222.
SD	2231.	162.	258.	848.	36.	626.	3.	535.	1.	0.	0.	4682.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	298.	15.	282.	317.	328.	525.	2.	228.	1.	11.	947.	563.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	30.	2.	24.	12.	20.	51.	2.	9.	0.	11.	947.	121.
TOT	1086.	265.	2883.	2239.	737.	5933.	6.	1393.	10.	11.	947.	1698.
SD	65.	2.	47.	31.	56.	97.	0.	22.	0.	0.	0.	175.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

LOUISIANA

FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 238

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5200.	6.	357.	84850.	624.
FLOW (MGY)	42476.	2.	834.	198386.	3187.
TOTAL CAPITAL COST	22401616.	10959.	835175.	198771568.	2371032.
TOTAL ANNUAL O&M COST	1592842.	660.	53600.	12756786.	148028.
TOTAL ANNUAL COST	4437846.	2052.	159665.	38000160.	445971.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
12756786.	9938577.	15305403.	38000752.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1592842.	618482.	929362.	3717446.	459047.	4.
100000. TO 500000.	477963.	113495.	266210.	5057999.	120310.	19.
50000. TO 100000.	99285.	51885.	72492.	1667321.	14627.	23.
10000. TO 50000.	49969.	10095.	23892.	1791902.	12514.	75.
0. TO 10000.	9882.	660.	4463.	522175.	2400.	117.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	28002016.	5150211.	11148329.	133779952.	7649428.	12.
1000000. TO 5000000.	4734063.	1045886.	2031214.	75154944.	1027150.	37.
500000. TO 1000000.	991593.	500719.	693293.	12479270.	155155.	18.
100000. TO 500000.	488667.	100932.	218546.	23165824.	103726.	106.
0. TO 100000.	97844.	13699.	59778.	3885576.	23723.	65.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	6429.	873.	1164.	7536.	135.	2793.	34.	4210.	3.	5668.	7862.	11458.
MIN	0.	1.	0.	0.	3.	0.	0.	8.	0.	0.	0.	0.
AVE	376.	64.	125.	171.	20.	395.	32.	211.	1.	5668.	7862.	2395.
TOT	13535.	9697.	15037.	32260.	727.	46260.	97.	34045.	46.	5668.	7862.	33536.
SD	1195.	133.	179.	642.	24.	546.	3.	432.	1.	0.	0.	3506.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	221.	12.	204.	245.	158.	431.	2.	173.	1.	9.	791.	427.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	21.	1.	14.	9.	10.	41.	2.	7.	0.	9.	791.	93.
TOT	752.	220.	1702.	1665.	384.	4848.	5.	1074.	8.	9.	791.	1299.
SD	47.	2.	29.	24.	27.	79.	0.	16.	0.	0.	0.	132.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

MAINE
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 114

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3000.	25.	427.	48721.	466.
FLOW (MGY)	21675.	5.	1323.	150874.	4414.
TOTAL CAPITAL COST	19562544.	16905.	843696.	96181328.	2541875.
TOTAL ANNUAL O&M COST	1066336.	687.	46812.	5336599.	145805.
TOTAL ANNUAL COST	3150778.	3021.	153960.	17551424.	467686.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
5336599.	4809066.	7405958.	17551616.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1066336.	542316.	813309.	2439927.	262196.	3.
100000. TO 500000.	478572.	118133.	215097.	1935871.	103880.	9.
50000. TO 100000.	94808.	72298.	83553.	167106.	15917.	2.
10000. TO 50000.	46529.	10110.	19022.	494567.	9246.	26.
0. TO 10000.	9877.	687.	4043.	299150.	2645.	74.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	24453168.	8222395.	15718912.	62875648.	7422627.	4.
1000000. TO 5000000.	3851182.	1013167.	2626145.	34139888.	1079520.	13.
500000. TO 1000000.	990903.	536099.	708379.	8500546.	131269.	12.
100000. TO 500000.	477357.	100748.	252637.	13386785.	113046.	53.
0. TO 100000.	97389.	21132.	41287.	1321191.	23804.	32.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	28.	118.	514.	6129.	34.	2578.	31.	3786.	5.	0.	7069.	0.
MIN	0.	1.	0.	0.	6.	0.	0.	7.	0.	0.	0.	0.
AVE	28.	18.	102.	316.	11.	388.	31.	265.	3.	0.	5421.	0.
TOT	28.	912.	3676.	20540.	212.	27151.	31.	27344.	23.	0.	16264.	0.
SD	0.	24.	126.	974.	8.	573.	0.	583.	1.	0.	1799.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	3.	2.	29.	157.	9.	367.	1.	109.	1.	0.	549.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	3.	1.	5.	11.	2.	34.	1.	7.	0.	0.	423.	0.
TOT	3.	30.	173.	737.	41.	2348.	1.	731.	3.	0.	1269.	0.
SD	0.	0.	6.	27.	3.	67.	0.	17.	0.	0.	137.	0.

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MAINE
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 114

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3000.	25.	427.	48721.	466.
FLOW (MGY)	31675.	4.	1311.	149434.	4417.
TOTAL CAPITAL COST	19562544.	16506.	834227.	95101872.	2543265.
TOTAL ANNUAL O&M COST	1066336.	687.	46313.	5279695.	145893.
TOTAL ANNUAL COST	3550778.	2865.	152259.	17357488.	467953.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
5279695.	4755093.	7322840.	17357616.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1066336.	542816.	813309.	2439927.	262196.	3.
100000. TO 500000.	478572.	118133.	215097.	1935871.	103880.	9.
50000. TO 100000.	94808.	72298.	83553.	167106.	15917.	2.
10000. TO 50000.	41450.	10110.	18983.	398653.	7839.	21.
0. TO 10000.	9844.	687.	4280.	338159.	2807.	79.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	24453168.	8222395.	15718912.	62875648.	7422627.	4.
1000000. TO 5000000.	3851182.	1013167.	2749756.	32997072.	1026944.	12.
500000. TO 1000000.	918083.	536099.	704090.	8449074.	125023.	12.
100000. TO 500000.	477357.	100748.	245426.	13252978.	107387.	54.
0. TO 100000.	97389.	20633.	40717.	1302943.	23074.	32.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	28.	118.	514.	6129.	34.	2578.	31.	3786.	5.	0.	7069.	0.
MIN	0.	1.	0.	0.	6.	0.	0.	7.	0.	0.	0.	0.
AVE	28.	18.	100.	315.	11.	381.	31.	262.	2.	0.	5421.	0.
TOT	28.	897.	3585.	20449.	212.	26665.	31.	26948.	22.	0.	16264.	0.
SD	0.	24.	127.	975.	8.	574.	0.	584.	1.	0.	1799.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	3.	2.	29.	157.	9.	367.	1.	109.	1.	0.	549.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	3.	1.	5.	11.	2.	33.	1.	7.	0.	0.	423.	0.
TOT	3.	30.	166.	731.	41.	2313.	1.	722.	3.	0.	1269.	0.
SD	0.	0.	6.	27.	3.	67.	0.	17.	0.	0.	137.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

MAINE
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 114

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3000.	25.	427.	48721.	466.
FLOW (MGY)	23786.	3.	1001.	114067.	3313.
TOTAL CAPITAL COST	15850481.	14256.	706171.	80503456.	2063425.
TOTAL ANNUAL O&M COST	862070.	659.	37947.	4325980.	117233.
TOTAL ANNUAL COST	2875079.	2470.	127631.	14549948.	378671.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4325980.	4025172.	6198763.	14549915.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	862070.	673024.	767547.	1535093.	133682.	2.
100000. TO 500000.	425565.	112356.	207680.	1869117.	114815.	9.
50000. TO 100000.	93177.	57144.	75056.	225168.	18017.	3.
10000. TO 50000.	41450.	10110.	18540.	370794.	7913.	20.
0. TO 10000.	9542.	659.	4073.	325829.	2513.	80.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	19813088.	6723746.	12780272.	51121088.	5984414.	4.
1000000. TO 5000000.	3177761.	1013167.	2308298.	27699584.	791601.	12.
500000. TO 1000000.	842802.	502827.	683870.	7522568.	121554.	11.
100000. TO 500000.	477357.	100748.	236380.	13000887.	100303.	55.
0. TO 100000.	97389.	17819.	40174.	1285579.	22526.	32.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	28.	118.	514.	4622.	34.	2200.	31.	3149.	5.	0.	5879.	0.
MIN	0.	1.	0.	0.	6.	0.	0.	7.	0.	0.	0.	0.
AVE	28.	17.	98.	241.	11.	333.	31.	226.	2.	0.	4509.	0.
TOT	28.	890.	3540.	15669.	212.	23338.	31.	23247.	21.	0.	13527.	0.
SD	0.	24.	127.	734.	8.	487.	0.	484.	1.	0.	1496.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	3.	2.	29.	121.	9.	290.	1.	84.	1.	0.	458.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	3.	1.	5.	9.	2.	27.	1.	6.	0.	0.	353.	0.
TOT	3.	29.	163.	576.	41.	1858.	1.	591.	3.	0.	1060.	0.
SD	0.	0.	6.	21.	3.	53.	0.	13.	0.	0.	115.	0.

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MARYLAND
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 229

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28000.	18.	636.	145728.	1994.
FLOW (MGY)	4450C.	5.	502.	114891.	3125.
TOTAL CAPITAL COST	3P536C96.	11935.	449586.	102955120.	2628660.
TOTAL ANNUAL O&M COST	3101819.	975.	35713.	817827C.	211290.
TOTAL ANNUAL COST	7955502.	2928.	92809.	21253328.	544065.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
8178270.	5147755.	7927540.	21253552.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3101819.	3101819.	3101819.	3101819.	0.	1.
100000. TO 500000.	483134.	124186.	247309.	2473092.	129180.	10.
50000. TO 100000.	93671.	55068.	71009.	781099.	12844.	11.
10000. TO 50000.	43286.	10412.	19524.	1132396.	8745.	58.
0. TO 10000.	9926.	975.	4630.	689908.	2463.	149.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	48170112.	6000886.	21617104.	64851312.	23114304.	3.
1000000. TO 5000000.	3378310.	1087422.	1760149.	26402240.	611217.	15.
500000. TO 1000000.	898775.	506890.	664770.	8642009.	117742.	13.
100000. TO 500000.	462140.	102165.	202305.	23871936.	79795.	118.
0. TO 100000.	98004.	14919.	61591.	4927249.	22185.	80.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	27284.	1209.	4450.	4282.	56.	1866.	36.	1697.	13.	0.	0.	5939.
MIN	0.	1.	0.	0.	6.	0.	0.	6.	0.	0.	0.	0.
AVE	2492.	26.	163.	80.	19.	135.	31.	97.	3.	0.	0.	2746.
TOT	29909.	3967.	19396.	10690.	509.	15401.	94.	14623.	130.	0.	0.	8237.
SD	7821.	103.	431.	389.	12.	218.	4.	197.	2.	0.	0.	2770.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	654.	30.	1970.	967.	29.	330.	2.	81.	3.	0.	0.	222.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	78.	1.	33.	7.	7.	10.	2.	4.	1.	C.	C.	104.
TOT	937.	158.	3479.	957.	187.	1190.	5.	527.	28.	0.	0.	312.
SD	184.	2.	183.	33.	7.	33.	0.	9.	1.	C.	0.	102.

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MARYLAND
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 229

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28000.	18.	636.	145728.	1994.
FLOW (MGY)	44500.	5.	468.	107243.	3105.
TOTAL CAPITAL COST	38536096.	11935.	421833.	96599744.	2593045.
TOTAL ANNUAL O&M COST	3101819.	975.	33131.	7587072.	209214.
TOTAL ANNUAL COST	7995902.	2928.	86703.	19855008.	537937.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
7587072.	4829986.	7438176.	19855232.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3101819.	3101819.	3101819.	3101819.	0.	1.
100000. TO 500000.	483134.	105309.	201655.	2016547.	118446.	10.
50000. TO 100000.	88863.	55068.	69278.	623506.	11130.	9.
10000. TO 50000.	48571.	10188.	20085.	1144866.	10008.	57.
0. TO 10000.	9926.	975.	4608.	700382.	2435.	152.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	48170112.	6000886.	20420464.	61261424.	24038064.	3.
1000000. TO 5000000.	3378310.	1039183.	1629000.	21177008.	638517.	13.
500000. TO 1000000.	975362.	506890.	692381.	10385722.	143926.	15.
100000. TO 500000.	462140.	102165.	196468.	22986752.	77387.	117.
0. TO 100000.	97774.	14919.	60984.	4939669.	21279.	81.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	27284.	1209.	4450.	4282.	56.	1886.	36.	1697.	13.	0.	0.	4130.
MIN	0.	1.	0.	0.	6.	0.	0.	6.	0.	0.	0.	0.
AVE	2419.	24.	151.	74.	19.	133.	31.	97.	3.	0.	0.	1909.
TOT	29023.	3646.	17960.	9888.	509.	15134.	94.	14493.	126.	0.	0.	5728.
SD	7834.	101.	421.	386.	12.	218.	4.	197.	2.	0.	0.	1927.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	654.	30.	1970.	367.	29.	330.	2.	81.	3.	0.	0.	156.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	74.	1.	30.	7.	7.	10.	2.	3.	1.	0.	0.	73.
TOT	890.	150.	3548.	878.	187.	1162.	5.	522.	27.	0.	0.	219.
SD	184.	2.	181.	33.	7.	33.	0.	9.	1.	0.	0.	72.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

MARYLAND
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 229

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28000.	18.	636.	145728.	1994.
FLOW (MGY)	44500.	4.	435.	99674.	3052.
TOTAL CAPITAL COST	38536096.	11935.	400070.	91615936.	2576413.
TOTAL ANNUAL O&M COST	3101819.	975.	31184.	7141240.	208073.
TOTAL ANNUAL COST	7995902.	2928.	81992.	18776176.	534811.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
7141240.	4580796.	7054423.	18776448.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3101819.	3101819.	3101819.	3101819.	0.	1.
100000. TO 500000.	406578.	104908.	189595.	1706358.	98226.	9.
50000. TO 100000.	94462.	61595.	73977.	517841.	11320.	7.
10000. TO 50000.	48506.	10478.	21122.	1077234.	10633.	51.
0. TO 10000.	9909.	975.	4584.	738039.	2468.	161.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	48170112.	5204145.	19528352.	58585056.	24804496.	3.
1000000. TO 5000000.	3378310.	1117944.	1708198.	17081984.	677441.	10.
500000. TO 1000000.	955725.	506890.	695762.	12523714.	163149.	18.
100000. TO 500000.	462140.	100264.	185884.	21562544.	74737.	116.
0. TO 100000.	97774.	14919.	58140.	4767478.	20868.	82.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	27284.	1209.	4450.	4282.	56.	1684.	35.	1488.	13.	0.	0.	3105.
MIN	0.	1.	0.	0.	6.	0.	0.	6.	0.	0.	0.	0.
AVE	2387.	23.	142.	69.	19.	126.	30.	93.	2.	0.	0.	1435.
TOT	28650.	3518.	16913.	9225.	503.	14375.	91.	13921.	116.	0.	0.	4306.
SD	7842.	101.	420.	381.	11.	200.	4.	183.	2.	0.	0.	1448.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	654.	30.	1970.	367.	29.	279.	2.	81.	3.	0.	0.	118.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	72.	1.	29.	6.	7.	9.	1.	3.	0.	0.	0.	55.
TOT	864.	145.	3396.	819.	181.	1046.	4.	496.	24.	0.	0.	166.
SD	185.	2.	191.	32.	7.	28.	0.	9.	1.	0.	0.	55.

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MASSACHUSETTS
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 514

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10000.	13.	582.	299294.	996.
FLOW (MGY)	18100.	0.	317.	162792.	1111.
TOTAL CAPITAL COST	12955600.	3362.	278940.	143375296.	697026.
TOTAL ANNUAL C&M COST	838834.	273.	18267.	9389423.	48277.
TOTAL ANNUAL COST	2489274.	700.	53689.	27596032.	136062.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
9389423.	7168764.	11039892.	27598064.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	838834.	838834.	838834.	838834.	0.	1.
100000. TO 500000.	297551.	106556.	168398.	2357577.	64646.	14.
50000. TO 100000.	93826.	50490.	70141.	1893819.	14141.	27.
10000. TO 50000.	45521.	10076.	18878.	2888270.	8659.	153.
0. TO 10000.	9915.	273.	4423.	1411004.	2605.	319.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	16244500.	16244500.	16244500.	16244500.	0.	1.
1000000. TO 5000000.	4357301.	1013167.	1798166.	70128480.	839419.	39.
500000. TO 1000000.	989554.	518569.	702861.	28114448.	143523.	40.
100000. TO 500000.	473938.	101302.	209916.	54998096.	96756.	262.
0. TO 100000.	97719.	4202.	56602.	9735486.	24070.	172.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	94.	279.	1057.	3531.	62.	1851.	29.	2642.	15.	0.	4932.	0.
MIN	0.	0.	0.	0.	4.	0.	0.	4.	0.	0.	0.	0.
AVE	18.	12.	83.	46.	13.	193.	29.	126.	2.	0.	4932.	0.
TOT	414.	4071.	26692.	17983.	567.	4864.	29.	39774.	309.	0.	4932.	0.
SD	25.	21.	104.	197.	11.	259.	0.	227.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	23.	4.	174.	113.	32.	266.	1.	78.	8.	0.	459.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	3.	1.	7.	3.	4.	15.	1.	4.	0.	0.	459.	0.
TOT	69.	220.	2149.	1256.	170.	3808.	1.	1190.	68.	0.	459.	0.
SD	5.	0.	14.	8.	7.	30.	0.	7.	1.	0.	0.	0.

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MASSACHUSETTS
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 514

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10000.	13.	582.	299294.	996.
FLOW (MGY)	18100.	0.	305.	156711.	1110.
TOTAL CAPITAL COST	12995600.	3362.	270582.	139079168.	696757.
TOTAL ANNUAL O&M COST	838834.	273.	17499.	8994343.	48135.
TOTAL ANNUAL COST	2489274.	700.	51859.	26655440.	135934.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
8994343.	6953957.	10709090.	26657376.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	838834.	838834.	838834.	838834.	0.	1.
100000. TO 500000.	297551.	106556.	171915.	2234896.	65877.	13.
50000. TO 100000.	93826.	50490.	71137.	1920686.	14798.	27.
10000. TO 50000.	45521.	10009.	18401.	2502561.	8162.	136.
0. TO 10000.	9939.	273.	4443.	1497440.	2548.	337.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	16244500.	16244500.	16244500.	16244500.	0.	1.
1000000. TO 5000000.	4357301.	1013167.	1816616.	69031440.	842633.	38.
500000. TO 1000000.	989594.	500541.	695940.	25749776.	151901.	37.
100000. TO 500000.	473938.	100476.	204365.	52317424.	94046.	256.
0. TO 100000.	99261.	4202.	57734.	10507622.	24330.	182.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	94.	279.	1057.	3531.	62.	1891.	29.	2642.	12.	0.	4932.	0.
MIN	0.	0.	0.	0.	4.	0.	0.	4.	0.	0.	0.	0.
AVE	18.	11.	78.	45.	13.	189.	29.	123.	2.	0.	4932.	0.
TOT	413.	3811.	25031.	17417.	565.	47684.	29.	38927.	271.	0.	4932.	0.
SD	25.	21.	101.	197.	12.	258.	0.	227.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	23.	4.	174.	113.	32.	206.	1.	78.	4.	0.	459.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	3.	1.	6.	3.	4.	15.	1.	4.	0.	0.	459.	0.
TOT	68.	212.	1942.	1196.	169.	3727.	1.	1165.	56.	0.	459.	0.
SD	5.	0.	13.	8.	7.	30.	0.	7.	1.	0.	0.	0.

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MASSACHUSETTS
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 514

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10000.	13.	582.	299294.	996.
FLOW (MGY)	13592.	0.	245.	126165.	842.
TOTAL CAPITAL COST	10575513.	3362.	241018.	123883488.	577285.
TOTAL ANNUAL O&M COST	680438.	273.	15079.	7750801.	39386.
TOTAL ANNUAL COST	2023527.	700.	45686.	23482528.	111987.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
7750801.	6194174.	9539023.	23483998.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	680438.	680438.	680438.	680438.	0.	1.
100000. TO 500000.	234001.	100503.	159790.	1597899.	50222.	10.
50000. TO 100000.	93924.	50490.	68877.	1446422.	12741.	21.
10000. TO 50000.	48829.	10076.	19460.	2471461.	9627.	127.
0. TO 10000.	9765.	273.	4379.	1554639.	2485.	355.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	13219391.	13219391.	13219391.	13219391.	0.	1.
1000000. TO 5000000.	3590458.	1013167.	1676232.	53639440.	720211.	32.
500000. TO 1000000.	989122.	510201.	718019.	26566688.	152385.	37.
100000. TO 500000.	495920.	100122.	203577.	49672720.	95353.	244.
0. TO 100000.	99676.	4202.	58790.	11758083.	24110.	200.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	94.	279.	1057.	2662.	62.	1614.	29.	2198.	10.	0.	4102.	0.
MIN	0.	0.	0.	0.	4.	0.	0.	4.	0.	0.	0.	0.
AVE	18.	11.	74.	36.	13.	168.	29.	109.	2.	0.	4102.	0.
TOT	412.	3621.	23802.	14227.	563.	42442.	29.	34442.	243.	0.	4102.	0.
SD	25.	21.	99.	151.	12.	220.	0.	190.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	23.	4.	174.	87.	32.	162.	1.	60.	3.	0.	384.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	3.	1.	6.	3.	4.	12.	1.	3.	0.	0.	384.	0.
TOT	68.	205.	1802.	1005.	169.	3060.	1.	1011.	47.	0.	384.	0.
SD	5.	0.	13.	6.	7.	23.	0.	5.	0.	0.	0.	0.

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MICHIGAN
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 667

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	18000.	13.	776.	517765.	1647.
FLOW (MGY)	90006.	1.	657.	438280.	4172.
TOTAL CAPITAL COST	63863744.	5077.	533167.	355622144.	3137907.
TOTAL ANNUAL O&M COST	3650700.	419.	51157.	34121520.	239180.
TOTAL ANNUAL COST	11944145.	1064.	118877.	79290800.	631985.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
34121520.	17781104.	27382880.	79285504.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3950700.	505230.	1812651.	12688558.	1545728.	7.
100000. TO 500000.	486155.	100759.	189124.	8699700.	87509.	46.
50000. TO 100000.	94806.	50760.	69834.	4399551.	13619.	63.
10000. TO 50000.	49535.	10027.	22490.	6949508.	11164.	309.
0. TO 10000.	9956.	419.	5732.	1387051.	2537.	242.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	79829680.	5526128.	30743152.	184458944.	30224192.	6.
1000000. TO 5000000.	4788263.	1005192.	1884318.	103637520.	867618.	55.
500000. TO 1000000.	998590.	502638.	741437.	58573504.	151252.	79.
100000. TO 500000.	494480.	100611.	225269.	88305472.	98804.	392.
0. TO 100000.	99206.	6346.	71179.	9609214.	20121.	135.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	40733.	1774.	4955.	9073.	432.	2445.	32.	7343.	37.	0.	3828.	3303.
MIN	0.	0.	0.	0.	5.	0.	0.	10.	0.	0.	0.	0.
AVE	2239.	29.	177.	93.	32.	210.	32.	197.	4.	0.	3828.	1249.
TOT	87331.	15076.	87051.	50092.	1450.	52739.	64.	50556.	1230.	0.	3828.	6244.
SD	8260.	107.	366.	480.	64.	262.	0.	528.	5.	0.	0.	1190.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	831.	38.	2511.	468.	1309.	524.	2.	538.	25.	0.	442.	142.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	64.	1.	32.	9.	39.	21.	2.	9.	1.	0.	442.	55.
TOT	2511.	719.	15751.	4795.	1787.	5209.	3.	2203.	430.	0.	442.	273.
SD	167.	2.	144.	31.	192.	45.	0.	36.	3.	0.	0.	51.

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MICHIGAN
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 667

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	18000.	13.	776.	517765.	1647.
FLOW (MGY)	81138.	1.	517.	344831.	3548.
TOTAL CAPITAL COST	55021232.	5071.	422933.	282096128.	2408178.
TOTAL ANNUAL O&M COST	3499223.	419.	39250.	26179968.	188205.
TOTAL ANNUAL COST	10486918.	1063.	92964.	62007152.	488526.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
26179968.	14104805.	21721376.	62006148.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3499223.	770695.	1846037.	9230189.	1201651.	5.
100000. TO 500000.	486195.	100759.	185635.	6311584.	83271.	34.
50000. TO 100000.	99182.	50891.	70554.	3316016.	14213.	47.
10000. TO 50000.	49662.	10093.	21629.	5493672.	11103.	254.
0. TO 10000.	9956.	419.	5600.	1831307.	2311.	327.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	68776528.	5250086.	22759696.	136558176.	23984688.	6.
1000000. TO 5000000.	4788263.	1005192.	1862245.	81938816.	824100.	44.
500000. TO 1000000.	994919.	505899.	756769.	45406112.	139100.	60.
100000. TO 500000.	498980.	100723.	207541.	74507168.	94777.	359.
0. TO 100000.	99510.	6338.	71843.	14224907.	19536.	198.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	33690.	1642.	4216.	8192.	412.	2445.	32.	6869.	32.	0.	3828.	3147.
MIN	0.	0.	0.	0.	5.	0.	0.	10.	0.	0.	0.	0.
AVE	1435.	21.	136.	71.	31.	196.	32.	188.	3.	0.	3828.	1193.
TOT	55951.	11249.	66763.	38532.	1407.	49087.	64.	48365.	892.	0.	3828.	5963.
SD	5816.	90.	297.	408.	61.	285.	0.	498.	3.	0.	0.	1132.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	572.	27.	1667.	371.	1202.	524.	2.	484.	13.	0.	442.	135.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	48.	1.	22.	7.	36.	19.	2.	8.	1.	0.	442.	52.
TOT	1891.	588.	10707.	3512.	1654.	4805.	3.	2051.	269.	0.	442.	261.
SD	123.	2.	100.	24.	177.	45.	0.	32.	2.	0.	0.	48.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

MICHIGAN
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 667

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	18000.	13.	776.	517765.	1647.
FLOW (MGY)	33247.	0.	367.	244896.	1875.
TOTAL CAPITAL COST	17935904.	4104.	305711.	203909152.	1081895.
TOTAL ANNUAL O&M COST	1923034.	375.	29306.	19547280.	118572.
TOTAL ANNUAL COST	3884960.	896.	68130.	45442624.	253752.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
19547280.	10195456.	15700997.	45443728.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1923034.	770695.	1238978.	6194894.	513372.	5.
100000. TO 500000.	407209.	100759.	172048.	4473248.	71823.	26.
50000. TO 100000.	99984.	50261.	69392.	2428716.	14308.	35.
10000. TO 50000.	49670.	10042.	21505.	4429366.	11102.	206.
0. TO 10000.	9835.	375.	5120.	2022459.	2205.	395.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	22419872.	8138096.	13933011.	69665056.	6142389.	5.
1000000. TO 5000000.	3891697.	1021597.	1862936.	68928640.	772900.	37.
500000. TO 1000000.	990200.	505899.	737761.	35412544.	147745.	48.
100000. TO 500000.	492866.	100723.	199160.	63930432.	96281.	321.
0. TO 100000.	99306.	5129.	66220.	16952400.	19710.	256.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	7733.	843.	2928.	3400.	276.	2445.	32.	3870.	21.	0.	3828.	2366.
MIN	0.	0.	0.	0.	5.	0.	0.	10.	0.	0.	0.	0.
AVE	502.	15.	105.	51.	24.	183.	31.	160.	2.	0.	3828.	911.
TOT	19576.	7968.	51650.	27324.	1083.	45956.	63.	41231.	674.	0.	3828.	4553.
SD	1702.	55.	211.	228.	40.	280.	0.	347.	2.	0.	0.	837.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	425.	21.	1202.	225.	577.	524.	2.	202.	9.	0.	442.	102.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	32.	1.	15.	5.	19.	18.	2.	6.	1.	0.	442.	40.
TOT	1265.	492.	7394.	2605.	860.	4487.	3.	1616.	183.	0.	442.	201.
SD	83.	1.	68.	16.	84.	45.	0.	16.	1.	0.	0.	36.

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MINNESOTA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 250

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3900.	15.	326.	81498.	484.
FLOW (MGY)	4452.	7.	248.	62006.	571.
TOTAL CAPITAL COST	2672171.	24062.	254718.	63679408.	385646.
TOTAL ANNUAL O&M COST	188190.	1426.	17391.	4347819.	28817.
TOTAL ANNUAL COST	527005.	4560.	49741.	12435231.	76893.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4347819.	3183970.	4903312.	12435101.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	188190.	108663.	148200.	1185600.	32806.	8.
50000. TO 100000.	94934.	50993.	67296.	740254.	14281.	11.
10000. TO 50000.	49174.	10269.	19793.	1820940.	9233.	92.
0. TO 10000.	9883.	1426.	4324.	601085.	2550.	139.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3340213.	1030524.	1681267.	33625344.	704014.	20.
500000. TO 1000000.	949583.	518190.	717623.	12917220.	129281.	18.
100000. TO 500000.	498629.	101228.	217272.	28028048.	99854.	129.
0. TO 100000.	99930.	30077.	60598.	5029626.	20185.	83.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	89.	283.	901.	634.	86.	1144.	0.	913.	42.	0.	0.	969.
MIN	0.	1.	0.	0.	9.	0.	0.	13.	0.	0.	0.	0.
AVE	35.	24.	75.	41.	28.	211.	0.	115.	5.	0.	0.	580.
TOT	349.	3147.	10971.	4762.	622.	20440.	0.	20206.	283.	0.	0.	2900.
SD	28.	39.	80.	95.	22.	221.	0.	168.	8.	0.	0.	339.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	16.	5.	81.	34.	80.	132.	0.	33.	17.	0.	0.	38.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	7.	1.	6.	4.	15.	17.	0.	4.	1.	0.	0.	23.
TOT	71.	130.	930.	406.	338.	1617.	0.	662.	81.	0.	0.	115.
SD	5.	1.	10.	6.	22.	26.	0.	5.	3.	0.	0.	13.

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MINNESOTA
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 250

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3900.	15.	326.	81498.	484.
FLOW (MGY)	4452.	4.	210.	52547.	524.
TOTAL CAPITAL COST	2277264.	16158.	227516.	56878976.	357354.
TOTAL ANNUAL O&M COST	188190.	965.	15006.	3751551.	26253.
TOTAL ANNUAL COST	477402.	3017.	43901.	10975298.	70858.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
3751551.	2843948.	4379679.	10975178.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	188190.	102930.	143267.	1002869.	31813.	7.
50000. TO 100000.	84561.	53696.	66235.	596117.	9809.	9.
10000. TO 50000.	44867.	10018.	19634.	1452910.	8537.	74.
0. TO 10000.	9936.	965.	4373.	699707.	2515.	160.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2846580.	1023718.	1614480.	29060640.	689216.	18.
500000. TO 1000000.	930490.	513274.	694193.	11801278.	132050.	17.
100000. TO 500000.	497849.	100437.	207902.	24116688.	93283.	116.
0. TO 100000.	99740.	20197.	61831.	6121249.	22042.	99.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	89.	230.	901.	470.	75.	1037.	0.	839.	34.	0.	0.	969.
MIN	0.	1.	0.	0.	9.	0.	0.	12.	0.	0.	0.	0.
AVE	34.	19.	66.	35.	25.	192.	0.	102.	4.	0.	0.	580.
TOT	338.	2569.	9682.	4046.	555.	18594.	0.	17973.	221.	0.	0.	2900.
SD	28.	33.	87.	84.	19.	205.	0.	152.	7.	0.	0.	339.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	16.	4.	81.	28.	62.	131.	0.	29.	13.	0.	0.	38.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	7.	1.	5.	3.	12.	15.	0.	3.	1.	0.	0.	23.
TOT	67.	115.	774.	342.	270.	1421.	0.	589.	58.	0.	0.	115.
SD	5.	1.	10.	5.	17.	24.	0.	5.	2.	0.	0.	13.

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MINNESOTA
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 250

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3900.	15.	326.	81498.	484.
FLOW (MGY)	4452.	3.	171.	42790.	487.
TOTAL CAPITAL COST	2277264.	13958.	197184.	49295968.	332508.
TOTAL ANNUAL O&M COST	188190.	829.	12512.	3128111.	23771.
TOTAL ANNUAL COST	477402.	2601.	37555.	9388811.	65465.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
3128111.	2464798.	3795787.	9388696.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	188190.	105138.	148121.	740606.	36404.	5.
50000. TO 100000.	79552.	53696.	64422.	515379.	8119.	8.
10000. TO 50000.	49605.	10248.	19177.	1150627.	9298.	60.
0. TO 10000.	9872.	829.	4077.	721561.	2470.	177.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2846580.	1043560.	1840689.	20247584.	714742.	11.
500000. TO 1000000.	998817.	510331.	725456.	13783655.	137801.	19.
100000. TO 500000.	485368.	101719.	198294.	21019216.	91724.	106.
0. TO 100000.	98676.	17447.	57636.	6570535.	22138.	114.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	89.	230.	901.	470.	65.	1037.	0.	839.	28.	0.	0.	969.
MIN	0.	1.	0.	0.	9.	0.	0.	10.	0.	0.	0.	0.
AVE	32.	15.	56.	30.	21.	169.	0.	87.	3.	0.	0.	580.
TOT	317.	2047.	8213.	3433.	470.	16425.	0.	15312.	180.	0.	0.	2900.
SD	29.	28.	81.	78.	16.	193.	0.	138.	5.	0.	0.	339.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	16.	3.	81.	28.	48.	131.	0.	29.	10.	0.	0.	38.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	6.	1.	4.	2.	9.	13.	0.	3.	1.	0.	0.	23.
TOT	61.	101.	600.	287.	199.	1215.	0.	505.	44.	0.	0.	115.
SD	5.	0.	8.	5.	13.	23.	0.	4.	2.	0.	0.	13.

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MISSISSIPPI
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 133

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2000.	15.	342.	45538.	331.
FLOW (MGY)	86263.	4.	1161.	154348.	7588.
TOTAL CAPITAL COST	38326288.	23194.	582837.	77517296.	3330331.
TOTAL ANNUAL O&M COST	2038290.	959.	35153.	4675296.	179812.
TOTAL ANNUAL COST	6905727.	4292.	109173.	14520057.	601621.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4675296.	3875864.	5968828.	14519988.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2038290.	2038290.	2038290.	2038290.	0.	1.
100000. TO 500000.	289298.	128485.	205022.	1025110.	64456.	5.
50000. TO 100000.	87400.	58530.	71245.	356227.	14339.	5.
10000. TO 50000.	48366.	10004.	19969.	858674.	10764.	43.
0. TO 10000.	9988.	959.	5026.	397029.	2804.	79.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	47907856.	47907856.	47907856.	47907856.	0.	1.
1000000. TO 5000000.	4412563.	1021142.	2059830.	20598304.	1004722.	10.
500000. TO 1000000.	979134.	558931.	799386.	7194478.	166909.	9.
100000. TO 500000.	494852.	101052.	229415.	19500288.	103890.	85.
0. TO 100000.	96924.	28992.	60579.	1696220.	22389.	28.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	130.	106.	840.	19150.	109.	4135.	66.	6640.	20.	0.	12402.	0.
MIN	0.	1.	0.	0.	7.	0.	0.	6.	1.	0.	0.	0.
AVE	71.	18.	119.	208.	29.	273.	54.	213.	4.	0.	12402.	0.
TOT	353.	1130.	8446.	19728.	724.	15565.	108.	18913.	149.	0.	12402.	0.
SD	58.	23.	141.	1553.	23.	588.	16.	718.	3.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	22.	2.	146.	345.	153.	514.	8.	259.	5.	0.	921.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	11.	7.	15.	22.	5.	6.	1.	0.	921.	0.
TOT	46.	40.	759.	457.	377.	1282.	10.	558.	26.	0.	921.	0.
SD	9.	0.	22.	36.	30.	73.	4.	28.	1.	0.	0.	0.

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MISSISSIPPI
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 133

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2000.	15.	342.	45538.	331.
FLOW (MGY)	45250.	4.	640.	85118.	3960.
TOTAL CAPITAL COST	23487680.	23169.	400727.	53296672.	2042162.
TOTAL ANNUAL O&M COST	1246363.	903.	22797.	3032042.	109372.
TOTAL ANNUAL COST	4229297.	3846.	73690.	9800787.	368330.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
3032042.	2664833.	4103841.	9800716.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1246363.	1246363.	1246363.	1246363.	0.	1.
100000. TO 500000.	146454.	102584.	122879.	368633.	22118.	3.
50000. TO 100000.	89463.	57474.	77245.	386226.	13823.	5.
10000. TO 50000.	47884.	10546.	20541.	554611.	11630.	27.
0. TO 10000.	9618.	903.	4910.	476242.	2599.	97.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	29359600.	29359600.	29359600.	29359600.	0.	1.
1000000. TO 5000000.	2854940.	1021142.	1606561.	12852489.	628573.	8.
500000. TO 1000000.	853685.	533531.	671533.	5372262.	122929.	8.
100000. TO 500000.	457109.	101369.	209828.	16786256.	96690.	80.
0. TO 100000.	99574.	28961.	62526.	2250920.	24552.	36.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	120.	81.	628.	8021.	60.	2893.	47.	4385.	10.	0.	8188.	0.
MIN	0.	1.	0.	0.	7.	0.	0.	6.	0.	0.	0.	0.
AVE	60.	13.	91.	114.	25.	207.	45.	158.	3.	0.	8188.	0.
TOT	299.	854.	6479.	10799.	625.	11820.	89.	14033.	112.	0.	8188.	0.
SD	50.	17.	104.	822.	15.	410.	3.	474.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	22.	2.	96.	193.	46.	302.	3.	137.	2.	0.	614.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	8.	1.	7.	4.	10.	14.	3.	4.	0.	0.	614.	0.
TOT	42.	34.	506.	392.	243.	811.	5.	366.	17.	0.	614.	0.
SD	8.	0.	14.	20.	11.	43.	0.	15.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

MISSISSIPPI
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 133

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2000.	15.	342.	45538.	331.
FLOW (MGY)	33981.	4.	472.	62789.	2972.
TOTAL CAPITAL COST	18974928.	17548.	325390.	43276880.	1648596.
TOTAL ANNUAL O&M COST	1005249.	606.	17771.	2363604.	88002.
TOTAL ANNUAL COST	3415063.	2834.	59096.	7859826.	297110.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2363604.	2163843.	3332318.	7859765.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1005249.	1005249.	1005249.	1005249.	0.	1.
100000. TO 500000.	115364.	115364.	115364.	115364.	0.	1.
50000. TO 100000.	99137.	57903.	74776.	373879.	16046.	5.
10000. TO 50000.	39864.	10534.	18331.	403287.	7964.	22.
0. TO 10000.	9627.	606.	4479.	465856.	2492.	104.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	23718656.	23718656.	23718656.	23718656.	0.	1.
1000000. TO 5000000.	2361155.	1009070.	1666151.	6664607.	554448.	4.
500000. TO 1000000.	975724.	549890.	670762.	5366092.	155760.	8.
100000. TO 500000.	491104.	101164.	211245.	15420856.	101474.	73.
0. TO 100000.	98629.	21935.	62267.	2926530.	23973.	47.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	84.	56.	550.	6048.	46.	2468.	42.	3648.	6.	0.	6810.	0.
MIN	0.	1.	0.	0.	7.	0.	0.	6.	0.	0.	0.	0.
AVE	34.	9.	71.	65.	20.	182.	40.	130.	2.	0.	6810.	0.
TOT	170.	599.	5051.	8038.	505.	10382.	80.	11552.	90.	0.	6810.	0.
SD	31.	11.	81.	620.	11.	348.	3.	393.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	17.	2.	80.	149.	32.	239.	2.	104.	1.	0.	513.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	5.	0.	5.	3.	7.	12.	2.	3.	0.	0.	513.	0.
TOT	27.	30.	359.	299.	167.	658.	4.	294.	13.	0.	513.	0.
SD	6.	0.	11.	15.	8.	34.	0.	11.	0.	0.	0.	0.

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MISSOURI
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 293

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	38000.	5.	591.	173093.	2314.
FLOW (MGY)	11233.	0.	293.	85797.	867.
TOTAL CAPITAL COST	6487405.	1766.	270363.	79216368.	648878.
TOTAL ANNUAL O&M COST	934050.	248.	22739.	6662654.	67087.
TOTAL ANNUAL COST	1757550.	472.	57076.	16723329.	144906.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
6662654.	3960818.	6099657.	16723129.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	934050.	934050.	934050.	934050.	0.	1.
100000. TO 500000.	352339.	102423.	209476.	1885280.	96214.	9.
50000. TO 100000.	91971.	50491.	66746.	867695.	13129.	13.
10000. TO 50000.	47244.	10283.	21781.	2112728.	11628.	97.
0. TO 10000.	5902.	248.	4988.	862974.	2426.	173.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	8109256.	8045710.	8079483.	16158966.	41972.	2.
1000000. TO 5000000.	4500546.	1124385.	2287290.	25160192.	1205082.	11.
500000. TO 1000000.	996108.	502534.	741445.	17794688.	160303.	24.
100000. TO 500000.	494153.	100142.	206375.	34464592.	99986.	167.
0. TO 100000.	95701.	2207.	61162.	5443398.	23413.	89.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	2663.	423.	1754.	1078.	61.	1185.	34.	980.	30.	0.	0.	4620.
MIN	0.	0.	0.	0.	3.	0.	0.	8.	0.	0.	0.	0.
AVE	260.	21.	129.	38.	19.	139.	31.	103.	4.	0.	0.	2608.
TOT	4424.	3845.	21608.	7068.	1019.	15464.	124.	17470.	373.	0.	0.	7823.
SD	672.	45.	200.	110.	13.	176.	4.	144.	6.	0.	0.	2051.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	213.	11.	576.	108.	58.	123.	2.	33.	15.	0.	0.	180.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	25.	1.	17.	4.	9.	9.	2.	3.	1.	0.	0.	103.
TOT	421.	168.	2875.	701.	466.	1042.	7.	574.	99.	0.	0.	308.
SD	53.	1.	53.	10.	11.	17.	0.	4.	2.	0.	0.	79.

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MISSOURI
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 293

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	38000.	5.	591.	173093.	2314.
FLOW (MGY)	9075.	0.	237.	69380.	707.
TOTAL CAPITAL COST	5186667.	1766.	231147.	67725952.	521999.
TOTAL ANNUAL O&M COST	774778.	248.	18966.	5557069.	55170.
TOTAL ANNUAL COST	1433484.	472.	48322.	14158437.	117517.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
5557069.	3386297.	5214895.	14158261.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	774778.	774778.	774778.	774778.	0.	1.
100000. TO 500000.	322873.	147342.	203745.	1222472.	74683.	6.
50000. TO 100000.	91086.	52008.	68032.	952444.	12660.	14.
10000. TO 50000.	45449.	10045.	21097.	1708863.	10459.	81.
0. TO 10000.	9709.	248.	4705.	898584.	2322.	191.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	6483333.	6076776.	6280054.	12560109.	287480.	2.
1000000. TO 5000000.	3854687.	1124385.	1986130.	21847440.	959100.	11.
500000. TO 1000000.	948276.	502534.	663018.	13923377.	139452.	21.
100000. TO 500000.	494153.	101671.	201664.	29039616.	92699.	144.
0. TO 100000.	99908.	2207.	63375.	7288166.	23683.	115.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1925.	361.	1566.	874.	59.	1044.	33.	893.	28.	0.	0.	3580.
MIN	0.	0.	0.	0.	3.	0.	0.	8.	0.	0.	0.	0.
AVE	184.	17.	114.	31.	17.	125.	31.	90.	3.	0.	0.	2020.
TOT	3126.	3193.	19097.	5775.	922.	13896.	123.	15229.	304.	0.	0.	6061.
SD	479.	38.	176.	87.	12.	162.	4.	128.	5.	0.	0.	1589.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	179.	10.	475.	89.	58.	114.	2.	31.	9.	0.	0.	141.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	20.	1.	14.	3.	7.	8.	2.	3.	1.	0.	0.	80.
TOT	343.	151.	2385.	576.	390.	890.	7.	500.	74.	0.	0.	240.
SD	44.	1.	44.	8.	10.	15.	0.	4.	2.	0.	0.	62.

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MISSOURI
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 293

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	38000.	5.	591.	173093.	2314.
FLOW (MGY)	6320.	0.	167.	48825.	475.
TOTAL CAPITAL COST	3629454.	1766.	183232.	53687040.	377236.
TOTAL ANNUAL O&M COST	564708.	248.	14157.	4147965.	38804.
TOTAL ANNUAL COST	1025649.	472.	37428.	10966365.	83755.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4147965.	2684351.	4133900.	10966216.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	564708.	564708.	564708.	564708.	0.	1.
100000. TO 500000.	202366.	116142.	150637.	602548.	39447.	4.
50000. TO 100000.	94849.	55691.	72940.	510578.	13994.	7.
10000. TO 50000.	46161.	10256.	21685.	1561350.	9718.	72.
0. TO 10000.	9921.	248.	4349.	908852.	2344.	209.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	4536817.	1032301.	2234177.	22341776.	1340957.	10.
500000. TO 1000000.	967953.	504808.	680820.	10212296.	163472.	15.
100000. TO 500000.	494153.	100810.	196938.	26783616.	89306.	136.
0. TO 100000.	99403.	2207.	58882.	7772365.	22292.	132.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1133.	276.	1244.	612.	59.	860.	33.	779.	17.	0.	0.	2691.
MIN	0.	0.	0.	0.	3.	0.	0.	5.	0.	0.	0.	0.
AVE	114.	13.	92.	21.	15.	106.	30.	73.	3.	0.	0.	1519.
TOT	1933.	2434.	15418.	3910.	812.	11802.	120.	12471.	234.	0.	0.	4556.
SD	282.	20.	130.	56.	11.	131.	3.	102.	3.	0.	0.	1195.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	133.	8.	343.	64.	58.	96.	2.	26.	5.	0.	0.	107.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	15.	1.	10.	2.	6.	6.	2.	2.	1.	0.	0.	61.
TOT	255.	131.	1672.	411.	321.	704.	6.	414.	50.	0.	0.	182.
SD	33.	1.	30.	5.	9.	12.	0.	3.	1.	0.	0.	47.

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MONTANA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 28

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2500.	25.	354.	9901.	595.
FLOW (MGY)	18485.	19.	1425.	39904.	3515.
TOTAL CAPITAL COST	14344988.	45120.	1523900.	42669216.	2904016.
TOTAL ANNUAL O&M COST	974631.	2219.	100516.	2814455.	185451.
TOTAL ANNUAL COST	2796444.	8212.	294052.	8233460.	546595.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2814455.	2133460.	3285528.	8233443.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	974631.	974631.	974631.	974631.	0.	1.
100000. TO 500000.	289312.	101267.	169045.	1183318.	61867.	7.
50000. TO 100000.	95476.	51639.	64888.	519103.	16129.	8.
10000. TO 50000.	43726.	11979.	20756.	103781.	13475.	5.
0. TO 10000.	7215.	2219.	4804.	33629.	2368.	7.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	17931232.	9052195.	13491712.	26983424.	6278429.	2.
1000000. TO 5000000.	3726753.	1126567.	1997168.	21968848.	867109.	11.
500000. TO 1000000.	917923.	599444.	807258.	2421775.	180100.	3.
100000. TO 500000.	493401.	120432.	198978.	1790801.	126824.	9.
0. TO 100000.	58998.	56399.	57265.	171796.	1500.	3.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	313.	153.	1035.	3919.	28.	2080.	0.	2911.	8.	6137.	5434.	2259.
MIN	0.	7.	0.	0.	14.	0.	0.	19.	3.	0.	0.	0.
AVE	152.	37.	250.	320.	18.	665.	0.	388.	5.	6137.	5434.	1304.
TOT	912.	622.	4504.	6402.	73.	5319.	0.	5425.	18.	6137.	5434.	7824.
SD	108.	39.	268.	861.	7.	623.	0.	755.	3.	0.	0.	700.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	44.	3.	233.	131.	13.	220.	0.	91.	2.	10.	533.	97.
MIN	0.	1.	0.	0.	3.	0.	0.	1.	1.	0.	0.	0.
AVE	25.	1.	39.	18.	6.	64.	0.	12.	1.	10.	533.	57.
TOT	150.	23.	700.	352.	23.	513.	0.	167.	4.	10.	533.	340.
SD	14.	1.	60.	30.	5.	68.	0.	24.	1.	0.	0.	30.

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MONTANA

FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 28

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2500.	25.	354.	9901.	595.
FLOW (MGY)	7919.	10.	721.	20177.	1509.
TOTAL CAPITAL COST	7838382.	31150.	962859.	26960064.	1581003.
TOTAL ANNUAL O&M COST	526845.	1429.	63796.	1786287.	101684.
TOTAL ANNUAL COST	1522318.	5385.	186079.	5210222.	298499.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1786287.	1348003.	2075923.	5210213.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	526845.	526845.	526845.	526845.	0.	1.
100000. TO 500000.	169022.	101267.	122001.	732005.	27288.	6.
50000. TO 100000.	76124.	50485.	63304.	126608.	18129.	2.
10000. TO 50000.	48237.	11979.	31382.	376580.	14375.	12.
0. TO 10000.	5489.	1429.	3465.	24255.	1785.	7.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	9797977.	9797977.	9797977.	9797977.	0.	1.
1000000. TO 5000000.	4591495.	1098643.	2249721.	15748047.	1202405.	7.
500000. TO 1000000.	974062.	703924.	868783.	6081482.	114964.	7.
100000. TO 500000.	468253.	102035.	239720.	1678043.	137399.	7.
0. TO 100000.	94853.	38938.	65774.	394642.	25753.	6.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	211.	120.	710.	1699.	23.	1301.	0.	1688.	6.	3014.	3150.	1750.
MIN	0.	5.	0.	0.	12.	0.	0.	13.	2.	0.	0.	0.
AVE	105.	29.	195.	156.	15.	453.	0.	234.	3.	3014.	3150.	1010.
TOT	632.	498.	3505.	3123.	60.	3624.	0.	3279.	14.	3014.	3150.	6061.
SD	71.	31.	183.	372.	5.	380.	0.	432.	2.	0.	0.	543.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	34.	3.	136.	61.	9.	109.	0.	43.	1.	6.	313.	76.
MIN	0.	1.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	19.	1.	26.	10.	4.	36.	0.	6.	1.	6.	313.	44.
TOT	115.	20.	473.	197.	16.	288.	0.	90.	3.	6.	313.	266.
SD	11.	1.	35.	14.	3.	33.	0.	11.	1.	0.	0.	23.

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MONTANA

FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 28

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2500.	25.	354.	9901.	595.
FLOW (MGY)	5947.	8.	536.	14996.	1139.
TOTAL CAPITAL COST	6415568.	26824.	767456.	21488768.	1285824.
TOTAL ANNUAL O&M COST	429254.	1232.	49299.	1380360.	82146.
TOTAL ANNUAL COST	1244030.	4638.	146766.	4109435.	242620.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1380360.	1074438.	1654634.	4109432.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	429254.	105382.	220195.	660585.	181342.	3.
50000. TO 100000.	86064.	50485.	71515.	429093.	14784.	6.
10000. TO 50000.	35396.	10046.	23747.	261218.	9344.	11.
0. TO 10000.	9626.	1232.	3684.	29468.	2719.	8.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	8019460.	8019460.	8019460.	8019460.	0.	1.
1000000. TO 5000000.	3728195.	1002785.	1779705.	12457939.	947238.	7.
500000. TO 1000000.	737229.	535361.	693714.	4855995.	70693.	7.
100000. TO 500000.	279671.	119040.	185672.	1114029.	62250.	6.
0. TO 100000.	83932.	33530.	59085.	413594.	21334.	7.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	139.	91.	577.	1281.	20.	1110.	0.	1404.	5.	2419.	2620.	1316.
MIN	0.	4.	0.	0.	10.	0.	0.	11.	2.	0.	0.	0.
AVE	72.	22.	154.	117.	13.	391.	0.	199.	3.	2419.	2620.	759.
TOT	430.	372.	2774.	2338.	52.	3129.	0.	2788.	11.	2419.	2620.	4556.
SD	46.	24.	149.	281.	5.	322.	0.	361.	2.	0.	0.	408.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	25.	2.	101.	47.	7.	86.	0.	34.	1.	5.	261.	57.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	14.	1.	19.	8.	3.	29.	0.	5.	0.	5.	261.	34.
TOT	85.	17.	341.	150.	12.	231.	0.	75.	2.	5.	261.	201.
SD	8.	1.	27.	11.	2.	26.	0.	9.	0.	0.	0.	18.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

NEBRASKA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 86

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5200.	6.	355.	30556.	626.
FLOW (MGY)	2682.	5.	235.	20227.	420.
TOTAL CAPITAL COST	3035788.	11802.	260235.	22380192.	465084.
TOTAL ANNUAL O&M COST	193228.	576.	17008.	1462662.	29364.
TOTAL ANNUAL COST	578773.	2834.	50058.	4304966.	88012.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1462662.	1119009.	1723273.	4304944.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	193228.	166190.	179709.	359418.	19119.	2.
50000. TO 100000.	78351.	50012.	62129.	186388.	14608.	3.
10000. TO 50000.	44700.	10348.	23521.	682095.	11630.	29.
0. TO 10000.	9827.	976.	4515.	234774.	2479.	52.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3794735.	1073736.	2277341.	11386709.	1214996.	5.
500000. TO 1000000.	759521.	536935.	622902.	4983216.	62436.	8.
100000. TO 500000.	489361.	102885.	217952.	10025769.	112348.	46.
0. TO 100000.	98967.	14753.	58512.	1579834.	24327.	27.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	78.	324.	271.	759.	46.	1266.	37.	686.	17.	0.	0.	857.
MIN	0.	1.	0.	0.	6.	0.	0.	6.	0.	0.	0.	0.
AVE	52.	28.	69.	52.	23.	214.	37.	114.	5.	0.	0.	757.
TOT	157.	1391.	2621.	2307.	491.	6628.	37.	7089.	144.	0.	0.	1515.
SD	27.	62.	57.	148.	12.	255.	0.	137.	5.	0.	0.	141.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	14.	5.	36.	36.	26.	135.	2.	17.	5.	0.	0.	32.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	9.	1.	6.	3.	9.	17.	2.	3.	1.	0.	0.	29.
TOT	27.	44.	212.	153.	197.	529.	2.	208.	33.	0.	0.	57.
SD	5.	1.	7.	7.	9.	31.	0.	3.	1.	0.	0.	5.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

NEBRASKA
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 86

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5200.	6.	355.	30556.	626.
FLOW (MGY)	1931.	5.	175.	15014.	304.
TOTAL CAPITAL COST	2413733.	11802.	213379.	18350592.	369267.
TOTAL ANNUAL O&M COST	147284.	976.	13579.	1167779.	22553.
TOTAL ANNUAL COST	453828.	2834.	40678.	3498308.	69014.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1167779.	917530.	1412994.	3498302.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	147284.	126756.	137020.	274040.	14516.	2.
50000. TO 100000.	59984.	59984.	59984.	59984.	0.	1.
10000. TO 50000.	44814.	11168.	22444.	605977.	10571.	27.
0. TO 10000.	9364.	976.	4068.	227785.	2348.	56.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3017166.	1082970.	2048331.	8193327.	935258.	4.
500000. TO 1000000.	836291.	505838.	594188.	2970938.	138302.	5.
100000. TO 500000.	487639.	100303.	229984.	9659319.	121975.	42.
0. TO 100000.	97200.	14753.	60423.	2114795.	24499.	35.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	57.	254.	271.	549.	37.	1055.	37.	556.	13.	0.	0.	668.
MIN	0.	1.	0.	0.	6.	0.	0.	6.	0.	0.	0.	0.
AVE	41.	22.	65.	40.	20.	179.	37.	91.	4.	0.	0.	587.
TOT	122.	1087.	2452.	1768.	417.	5556.	37.	5626.	113.	0.	0.	1174.
SD	17.	48.	56.	107.	11.	246.	0.	109.	4.	0.	0.	109.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	10.	4.	36.	26.	24.	103.	2.	13.	3.	0.	0.	25.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	7.	1.	5.	3.	7.	13	2.	3.	1.	0.	0.	22.
TOT	22.	39.	196.	125.	148.	403.	2.	165.	23.	0.	0.	45.
SD	4.	1.	7.	5.	7.	24.	0.	3.	1.	0.	0.	4.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

NEBRASKA
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 86

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5200.	6.	355.	30556.	626.
FLOW (MGY)	1325.	5.	136.	11709.	223.
TOTAL CAPITAL COST	1863865.	11802.	178486.	15349814.	286451.
TOTAL ANNUAL O&M COST	108113.	976.	11136.	957692.	17088.
TOTAL ANNUAL COST	344824.	2834.	33804.	2907102.	52944.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
957692.	767491.	1181935.	2907117.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	108113.	108113.	108113.	108113.	0.	1.
50000. TO 100000.	93119.	93119.	93119.	93119.	0.	1.
10000. TO 50000.	44700.	10238.	21209.	530227.	10556.	25.
0. TO 10000.	9677.	976.	3834.	226232.	2408.	59.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2329831.	1118028.	1835367.	5506101.	635904.	3.
500000. TO 1000000.	818881.	536935.	663205.	1989615.	143256.	3.
100000. TO 500000.	487639.	111366.	245520.	9084237.	116901.	37.
0. TO 100000.	98583.	14753.	60636.	2607330.	23530.	43.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	41.	192.	271.	379.	36.	857.	37.	436.	10.	0.	0.	499.
MIN	0.	1.	0.	0.	6.	0.	0.	6.	0.	0.	0.	0.
AVE	32.	18.	60.	30.	18.	152.	37.	75.	3.	0.	0.	441.
TOT	95.	858.	2293.	1333.	371.	4711.	37.	4675.	94.	0.	0.	882.
SD	9.	36.	54.	74.	10.	199.	0.	87.	3.	0.	0.	82.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	8.	3.	36.	19.	24.	76.	2.	10.	2.	0.	0.	19.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	6.	1.	5.	2.	6.	10.	2.	2.	1.	0.	0.	17.
TOT	17.	35.	181.	101.	121.	311.	2.	138.	18.	0.	0.	34.
SD	2.	1.	7.	4.	6.	17.	0.	2.	1.	0.	0.	3.

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NEVADA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 9

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1330.	75.	328.	2955.	397.
FLOW (MGY)	2528.	14.	563.	5070.	817.
TOTAL CAPITAL COST	1186458.	33809.	325498.	2929486.	377760.
TOTAL ANNUAL O&M COST	242557.	2441.	56802.	511220.	78806.
TOTAL ANNUAL COST	363237.	6735.	98141.	883265.	126684.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
511220.	146474.	225570.	883264.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	242557.	102360.	172458.	344917.	99134.	2.
50000. TO 100000.	79901.	52041.	65971.	131942.	19700.	2.
10000. TO 50000.	12235.	10575.	11405.	22810.	1174.	2.
0. TO 10000.	6669.	2441.	3851.	11552.	2441.	3.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1483072.	1483072.	1483072.	1483072.	0.	1.
500000. TO 1000000.	726388.	564677.	645533.	1291065.	114351.	2.
100000. TO 500000.	405950.	112979.	238856.	716567.	150772.	3.
0. TO 100000.	86633.	42261.	57052.	171155.	25618.	3.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	171.	690.	326.	0.	0.	0.	71.	0.	0.	0.	0.
MIN	0.	0.	32.	0.	0.	0.	0.	71.	0.	0.	0.	0.
AVE	0.	73.	221.	73.	0.	0.	0.	71.	0.	0.	0.	0.
TOT	0.	292.	1986.	581.	0.	0.	0.	71.	0.	0.	0.	0.
SD	0.	71.	224.	111.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	7.	190.	46.	0.	0.	0.	3.	0.	0.	0.	0.
MIN	0.	0.	2.	0.	0.	0.	0.	3.	0.	0.	0.	0.
AVE	0.	3.	45.	11.	0.	0.	0.	3.	0.	0.	0.	0.
TOT	0.	13.	409.	86.	0.	0.	0.	3.	0.	0.	0.	0.
SD	0.	2.	62.	16.	0.	0.	0.	0.	0.	0.	0.	0.

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NEVADA
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 9

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1330.	75.	328.	2955.	397.
FLOW (MGY)	2528.	14.	511.	4595.	821.
TOTAL CAPITAL COST	1186458.	33809.	298983.	2690844.	380673.
TOTAL ANNUAL O&M COST	242557.	2441.	52070.	468633.	79098.
TOTAL ANNUAL COST	393237.	6735.	90041.	810370.	127366.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
468633.	134542.	207195.	810370.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	242557.	102360.	172458.	344917.	99134.	2.
50000. TO 100000.	55691.	55691.	55691.	55691.	0.	1.
10000. TO 50000.	43605.	43605.	43605.	43605.	0.	1.
0. TO 10000.	7064.	2441.	4884.	24421.	2276.	5.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1483072.	1483072.	1483072.	1483072.	0.	1.
500000. TO 1000000.	726388.	726388.	726388.	726388.	0.	1.
100000. TO 500000.	427596.	127712.	303309.	909927.	156388.	3.
0. TO 100000.	86633.	42261.	61042.	244169.	22388.	4.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	171.	690.	326.	0.	0.	0.	45.	0.	0.	0.	0.
MIN	0.	0.	32.	0.	0.	0.	0.	45.	0.	0.	0.	0.
AVE	0.	71.	202.	68.	0.	0.	0.	45.	0.	0.	0.	0.
TOT	0.	284.	1817.	545.	0.	0.	0.	45.	0.	0.	0.	0.
SD	0.	73.	222.	112.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	7.	190.	46.	0.	0.	0.	2.	0.	0.	0.	0.
MIN	0.	0.	2.	0.	0.	0.	0.	2.	0.	0.	0.	0.
AVE	0.	3.	41.	10.	0.	0.	0.	2.	0.	0.	0.	0.
TOT	0.	13.	373.	81.	0.	0.	0.	2.	0.	0.	0.	0.
SD	0.	3.	62.	16.	0.	0.	0.	0.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

NEVADA

FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 9

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1330.	75.	328.	2955.	397.
FLOW (MGY)	2480.	14.	437.	3934.	819.
TOTAL CAPITAL COST	1169742.	33809.	261292.	2351625.	380086.
TOTAL ANNUAL O&M COST	238486.	2441.	44959.	404633.	78958.
TOTAL ANNUAL COST	387043.	6735.	78143.	703290.	127168.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
404633.	117581.	181075.	703289.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	238486.	100659.	169573.	339145.	97459.	2.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	22231.	21295.	21763.	43526.	662.	2.
0. TO 10000.	6669.	2441.	4392.	21962.	1935.	5.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1462177.	1462177.	1462177.	1462177.	0.	1.
500000. TO 1000000.	716519.	716519.	716519.	716519.	0.	1.
100000. TO 500000.	212762.	109696.	176142.	528426.	57644.	3.
0. TO 100000.	86633.	42261.	58103.	232411.	21023.	4.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	168.	682.	320.	0.	0.	0.	38.	0.	0.	0.	0.
MIN	0.	0.	32.	0.	0.	0.	0.	38.	0.	0.	0.	0.
AVE	0.	66.	174.	61.	0.	0.	0.	38.	0.	0.	0.	0.
TOT	0.	264.	1562.	487.	0.	0.	0.	38.	0.	0.	0.	0.
SD	0.	76.	219.	112.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	6.	187.	45.	0.	0.	0.	2.	0.	0.	0.	0.
MIN	0.	0.	2.	0.	0.	0.	0.	2.	0.	0.	0.	0.
AVE	0.	3.	35.	9.	0.	0.	0.	2.	0.	0.	0.	0.
TOT	0.	12.	318.	72.	0.	0.	0.	2.	0.	0.	0.	0.
SD	0.	3.	62.	16.	0.	0.	0.	0.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

NEW HAMPSHIRE
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 92

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5900.	26.	519.	47786.	781.
FLOW (MGY)	39463.	5.	708.	65095.	4034.
TOTAL CAPITAL COST	27591760.	16813.	550479.	50644096.	2369062.
TOTAL ANNUAL O&M COST	1232981.	701.	27675.	2546131.	129239.
TOTAL ANNUAL COST	4102133.	3092.	97587.	8977988.	429953.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2546131.	2532204.	3899593.	8977928.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1232981.	1232981.	1232981.	1232981.	0.	1.
100000. TO 500000.	140035.	120735.	127357.	382071.	10983.	3.
50000. TO 100000.	60439.	53013.	56726.	113452.	5252.	2.
10000. TO 50000.	43386.	10154.	17931.	609662.	9102.	34.
0. TO 10000.	9584.	701.	4000.	207994.	2608.	52.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	28239696.	28239696.	28239696.	28239696.	0.	1.
1000000. TO 5000000.	3828667.	1019552.	1893000.	15144000.	1004973.	8.
500000. TO 1000000.	779894.	539426.	618087.	7417048.	81130.	12.
100000. TO 500000.	493215.	104163.	283355.	10484149.	129992.	37.
0. TO 100000.	99396.	21016.	59435.	2020780.	24199.	34.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	9.	242.	497.	7422.	32.	2871.	0.	4290.	7.	0.	8009.	0.
MIN	0.	2.	0.	0.	6.	0.	0.	8.	0.	0.	0.	0.
AVE	9.	21.	98.	152.	14.	340.	0.	209.	2.	0.	8009.	0.
TOT	9.	913.	4984.	10472.	141.	12930.	0.	13143.	42.	0.	8009.	0.
SD	0.	40.	102.	892.	8.	491.	0.	550.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1.	3.	27.	187.	15.	295.	0.	131.	2.	0.	620.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	1.	1.	5.	5.	4.	24.	0.	5.	0.	0.	620.	0.
TOT	1.	27.	261.	357.	39.	906.	0.	328.	7.	0.	620.	0.
SD	0.	0.	6.	22.	5.	50.	0.	17.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

NEW HAMPSHIRE
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 92

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5900.	26.	519.	47786.	781.
FLOW (MGY)	38463.	5.	698.	64179.	4036.
TOTAL CAPITAL COST	22591760.	16813.	541761.	49841968.	2369994.
TOTAL ANNUAL O&M COST	1232981.	701.	27171.	2499774.	129292.
TOTAL ANNUAL COST	4102133.	3092.	95976.	8829759.	430131.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2499774.	2492098.	3837829.	8829701.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1232981.	1232981.	1232981.	1232981.	0.	1.
100000. TO 500000.	140035.	120735.	127357.	382071.	10983.	3.
50000. TO 100000.	60439.	53013.	56726.	113452.	5252.	2.
10000. TO 50000.	43386.	10014.	18265.	529672.	9326.	29.
0. TO 10000.	9655.	701.	4239.	241625.	2691.	57.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	28239696.	28239696.	28239696.	28239696.	0.	1.
1000000. TO 5000000.	3828667.	1019552.	1893000.	15144000.	1004973.	8.
500000. TO 1000000.	723045.	500541.	593161.	7117930.	89042.	12.
100000. TO 500000.	493215.	104163.	264687.	9793403.	128510.	37.
0. TO 100000.	99396.	21016.	59058.	2007973.	23975.	34.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	9.	242.	497.	7422.	32.	2871.	0.	4290.	6.	0.	8009.	0.
MIN	0.	2.	0.	0.	6.	0.	0.	8.	0.	0.	0.	0.
AVE	9.	20.	93.	151.	14.	335.	0.	205.	2.	0.	8009.	0.
TOT	9.	869.	4733.	10391.	141.	12734.	0.	12917.	39.	0.	8009.	0.
SD	0.	40.	100.	892.	8.	492.	0.	551.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1.	3.	27.	187.	15.	295.	0.	131.	1.	0.	620.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	1.	1.	5.	5.	4.	24.	0.	5.	0.	0.	620.	0.
TOT	1.	26.	239.	351.	39.	894.	0.	323.	6.	0.	620.	0.
SD	0.	0.	6.	23.	5.	50.	0.	17.	0.	0.	0.	0.

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NEW HAMPSHIRE
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 92

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5900.	26.	519.	47786.	781.
FLOW (MGY)	28884.	5.	543.	49961.	3033.
TOTAL CAPITAL COST	18275888.	16813.	465604.	42835536.	1924443.
TOTAL ANNUAL O&M COST	995540.	701.	22795.	2097133.	104490.
TOTAL ANNUAL COST	3316577.	3092.	81927.	7537302.	348744.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2097133.	2141776.	3298334.	7537243.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	995540.	995540.	995540.	995540.	0.	1.
100000. TO 500000.	121301.	110376.	115839.	231677.	7725.	2.
50000. TO 100000.	95221.	95221.	95221.	95221.	0.	1.
10000. TO 50000.	47810.	10521.	20503.	471564.	11018.	23.
0. TO 10000.	9901.	701.	4664.	303157.	2892.	65.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	22844848.	22844848.	22844848.	22844848.	0.	1.
1000000. TO 5000000.	3828667.	1063256.	1949765.	11698591.	1037678.	6.
500000. TO 1000000.	910786.	515020.	664529.	5316235.	138668.	8.
100000. TO 500000.	477357.	104163.	272524.	11718552.	128277.	43.
0. TO 100000.	99396.	21016.	57846.	1966766.	22727.	34.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	9.	242.	497.	5596.	32.	2450.	0.	3568.	5.	0.	6662.	0.
MIN	0.	2.	0.	0.	6.	0.	0.	8.	0.	0.	0.	0.
AVE	9.	20.	91.	118.	14.	293.	0.	179.	2.	0.	6662.	0.
TOT	9.	851.	4619.	8142.	141.	11127.	0.	11250.	36.	0.	6662.	0.
SD	0.	40.	100.	674.	8.	425.	0.	460.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1.	3.	27.	144.	15.	233.	0.	100.	1.	0.	518.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	1.	1.	4.	4.	4.	19.	0.	4.	0.	0.	518.	0.
TOT	1.	26.	227.	285.	39.	727.	0.	269.	5.	0.	518.	0.
SD	0.	0.	5.	17.	5.	40.	0.	13.	0.	0.	0.	0.

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NEW JERSEY
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 702

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTUPING EMPLOYMENT	15000.	18.	519.	364170.	1084.
FLOW (MGY)	11776.	3.	256.	179452.	752.
TOTAL CAPITAL COST	203CCC64.	9055.	355053.	249247200.	1140724.
TOTAL ANNUAL O&M COST	8C9899.	80C.	21059.	14783227.	55692.
TOTAL ANNUAL COST	3387995.	2026.	66147.	46435264.	198005.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
14783227.	12462359.	19192016.	46437600.

DISTRIBUTION OF OPERATICN AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	8C5889.	555945.	658501.	1975504.	133831.	3.
100000. TO 500000.	348367.	107140.	196940.	3938803.	75078.	20.
50000. TO 100000.	98C79.	50706.	68750.	1856237.	13831.	27.
10000. TO 50000.	49332.	10001.	20009.	4902187.	9496.	245.
C. TC 10000.	9930.	800.	5186.	2110571.	2501.	407.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	25375C72.	6168320.	13525530.	81153184.	7025111.	6.
1000000. TO 5000000.	3960036.	1022296.	1867047.	70947792.	765354.	38.
500000. TO 1000000.	963821.	500009.	683479.	54678336.	134232.	80.
100000. TO 500000.	497658.	100448.	226683.	94073488.	100328.	415.
0. TO 100000.	98547.	11319.	65698.	10708712.	23275.	163.

DISTRIBUTICN OF TOTAL CAPITAL CCST FCR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	5925.	861.	1313.	2576.	101.	2755.	40.	2558.	22.	2050.	0.	12469.
MIN	0.	1.	0.	0.	5.	0.	0.	4.	0.	0.	0.	0.
AVE	170.	19.	127.	35.	20.	159.	40.	115.	3.	2050.	0.	4783.
TOT	14965.	9053.	57235.	15802.	2128.	53249.	120.	47175.	423.	2050.	0.	43044.
SD	741.	49.	173.	128.	15.	213.	0.	177.	3.	0.	0.	3951.

DISTRIBUTICN OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	202.	9.	241.	80.	64.	288.	2.	66.	6.	4.	0.	396.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	11.	1.	12.	3.	6.	10.	2.	3.	1.	4.	0.	155.
TOT	970.	381.	5260.	1569.	624.	3207.	5.	1289.	81.	4.	0.	1392.
SD	30.	1.	27.	6.	8.	22.	0.	5.	1.	0.	0.	125.

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NEW JERSEY
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 702

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	15000.	18.	519.	364170.	1084.
FLOW (MGY)	11775.	3.	229.	160956.	664.
TOTAL CAPITAL COST	12905880.	9055.	315396.	221408240.	819909.
TOTAL ANNUAL O&M COST	556640.	800.	18768.	13175049.	43803.
TOTAL ANNUAL COST	2195681.	2026.	58820.	41291552.	146014.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
13175049.	11070811.	17048416.	41293872.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	556640.	555945.	556293.	1112585.	572.	2.
100000. TO 500000.	419386.	100192.	176754.	3535086.	72407.	20.
50000. TO 100000.	98079.	50706.	69888.	1607415.	13180.	23.
10000. TO 50000.	49332.	10001.	20137.	4772451.	9936.	237.
0. TO 10000.	9930.	800.	5113.	2147589.	2453.	420.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 50000000.	96132300.	6819552.	10648777.	53243888.	4202903.	5.
5000000. TO 50000000.	8211310.	1022296.	1773817.	69178896.	783185.	39.
1000000. TO 5000000.	963821.	507642.	688470.	50946800.	134802.	74.
500000. TO 1000000.	697958.	100448.	222618.	92163840.	99473.	414.
0. TO 100000.	98567.	11319.	66056.	11229437.	23292.	170.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	2865.	861.	1393.	2576.	101.	2755.	40.	2558.	22.	2050.	0.	8671.
[illegible]	0.	1.	0.	0.	5.	0.	0.	4.	0.	0.	0.	0.
[illegible]	96.	18.	118.	32.	20.	156.	40.	113.	3.	2050.	0.	3326.
[illegible]	8455.	8589.	53138.	18051.	2099.	52215.	120.	46363.	417.	2050.	0.	29932.
SD	362.	67.	150.	122.	18.	214.	0.	177.	3.	0.	0.	2747.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	130.	9.	182.	80.	68.	288.	2.	66.	6.	4.	0.	278.
[illegible]	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
[illegible]	8.	1.	10.	3.	6.	9.	2.	3.	1.	4.	0.	109.
[illegible]	743.	371.	8575.	1422.	606.	3126.	5.	1264.	79.	4.	0.	978.
SD	20.	1.	21.	6.	8.	22.	0.	5.	1.	0.	0.	88.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

NEW JERSEY

FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 702

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	15000.	18.	519.	364170.	1084.
FLOW (MGY)	11776.	3.	208.	145911.	630.
TOTAL CAPITAL COST	10062441.	9055.	285342.	200310144.	676675.
TOTAL ANNUAL O&M COST	555945.	800.	16977.	11917980.	38548.
TOTAL ANNUAL COST	1833873.	2026.	53212.	37355104.	122714.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
11917980.	10015506.	15423873.	37357344.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	555945.	555945.	555945.	555945.	0.	1.
100000. TO 500000.	414862.	110499.	180756.	3253606.	77521.	18.
50000. TO 100000.	98395.	50370.	72256.	1589634.	15664.	22.
10000. TO 50000.	49332.	10021.	20585.	4302272.	10441.	209.
0. TO 10000.	9996.	800.	4904.	2216587.	2396.	452.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	12578051.	8493250.	10875664.	32626992.	2125631.	3.
1000000. TO 5000000.	4767541.	1017455.	1860543.	72561184.	960806.	39.
500000. TO 1000000.	963821.	507642.	687235.	48106432.	137134.	70.
100000. TO 500000.	497958.	100448.	212952.	84329184.	96594.	396.
0. TO 100000.	99717.	11319.	65806.	12766434.	23135.	194.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	1666.	861.	1313.	2576.	101.	2755.	40.	2558.	22.	2050.	0.	6517.
[illegible]	0.	1.	0.	0.	5.	0.	0.	4.	0.	0.	0.	0.
[illegible]	66.	17.	110.	30.	20.	147.	40.	106.	3.	2050.	0.	2500.
[illegible]	5819.	8029.	49783.	16875.	2049.	48937.	120.	43761.	388.	2050.	0.	22499.
[illegible]	213.	46.	161.	121.	15.	212.	0.	175.	3.	0.	0.	2065.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	152.	9.	175.	80.	64.	288.	2.	66.	6.	4.	0.	211.
[illegible]	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
[illegible]	7.	1.	9.	2.	6.	9.	2.	3.	0.	4.	0.	82.
[illegible]	619.	356.	4159.	1310.	586.	2875.	5.	1191.	72.	4.	0.	741.
[illegible]	15.	1.	20.	5.	8.	21.	0.	5.	1.	0.	0.	66.

[illegible] OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

NEW MEXICO
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 12

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	700.	24.	160.	1921.	186.
FLOW (MGD)	12156.	11.	1376.	16510.	3439.
TOTAL CAPITAL COST	3741096.	26768.	995454.	11945449.	1304634.
TOTAL ANNUAL O&M COST	519230.	1180.	87733.	1052800.	162433.
TOTAL ANNUAL COST	1010906.	4580.	214156.	2569871.	312441.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1052800.	597272.	919799.	2569871.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	575230.	575230.	575230.	575230.	0.	1.
100000. TO 500000.	188878.	188878.	188878.	188878.	0.	1.
50000. TO 100000.	83337.	55470.	66839.	200517.	14625.	3.
10000. TO 50000.	41961.	13692.	27826.	55653.	19989.	2.
0. TO 10000.	9123.	1180.	6504.	32522.	3196.	5.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	4676370.	1039726.	2681215.	13406079.	1687208.	5.
500000. TO 1000000.	557523.	557523.	557523.	557523.	0.	1.
100000. TO 500000.	297178.	131742.	186950.	934749.	63844.	5.
0. TO 100000.	33461.	33461.	33461.	33461.	0.	1.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	680.	789.	1416.	1100.	18.	622.	0.	103.	4.	0.	0.	2794.
MIN	0.	5.	0.	0.	15.	0.	0.	11.	3.	0.	0.	0.
AVE	191.	50.	343.	164.	16.	277.	0.	66.	4.	0.	0.	1381.
TOT	726.	644.	2760.	1368.	33.	830.	0.	331.	8.	0.	0.	5525.
SD	189.	91.	491.	379.	2.	300.	0.	38.	1.	0.	0.	976.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	66.	7.	379.	98.	5.	51.	0.	3.	1.	0.	0.	99.
MIN	0.	1.	0.	0.	3.	0.	0.	1.	1.	0.	0.	0.
AVE	27.	2.	84.	15.	4.	34.	0.	2.	1.	0.	0.	50.
TOT	89.	14.	514.	118.	8.	101.	0.	10.	1.	0.	0.	199.
SD	16.	2.	129.	34.	1.	49.	0.	1.	0.	0.	0.	34.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

NEW MEXICO
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 12

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	700.	24.	160.	1921.	186.
FLOW (MGY)	5046.	9.	599.	7192.	1417.
TOTAL CAPITAL COST	2217895.	24702.	587218.	7046613.	728761.
TOTAL ANNUAL O&M COST	264271.	1088.	44970.	539642.	75765.
TOTAL ANNUAL COST	493109.	4225.	119547.	1434562.	160978.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
539642.	352331.	542589.	1434561.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	264271.	113255.	188763.	377526.	106785.	2.
50000. TO 100000.	50142.	50142.	50142.	50142.	0.	1.
10000. TO 50000.	33441.	11316.	23364.	70092.	11193.	3.
0. TO 10000.	9658.	1088.	6980.	41883.	3174.	6.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2772368.	1237003.	2087238.	6261714.	780884.	3.
500000. TO 1000000.	834098.	637885.	735992.	1471983.	138744.	2.
100000. TO 500000.	297178.	131742.	173949.	1043692.	62027.	6.
0. TO 100000.	30878.	30878.	30878.	30878.	0.	1.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	207.	150.	810.	461.	18.	382.	0.	103.	4.	0.	0.	1694.
MIN	0.	5.	0.	0.	15.	0.	0.	10.	3.	0.	0.	0.
AVE	87.	28.	199.	69.	16.	196.	0.	66.	4.	0.	0.	837.
TOT	348.	251.	1590.	550.	33.	588.	0.	329.	8.	0.	0.	3350.
SD	82.	46.	256.	159.	2.	163.	0.	39.	1.	0.	0.	592.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	27.	8.	172.	44.	5.	44.	0.	3.	1.	0.	0.	61.
MIN	0.	1.	0.	0.	3.	0.	0.	1.	1.	0.	0.	0.
AVE	13.	1.	29.	7.	4.	18.	0.	2.	1.	0.	0.	31.
TOT	52.	9.	230.	53.	8.	54.	0.	10.	1.	0.	0.	122.
SD	10.	1.	58.	15.	1.	22.	0.	1.	0.	0.	0.	21.

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NEW MEXICO
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 12

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	700.	24.	160.	1921.	186.
FLOW (MGY)	3795.	7.	443.	5320.	1066.
TOTAL CAPITAL COST	1657995.	21273.	458547.	5502565.	560761.
TOTAL ANNUAL O&M COST	205812.	938.	34431.	413177.	58761.
TOTAL ANNUAL COST	392741.	3640.	92667.	1112002.	124963.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
413177.	275128.	423697.	1112002.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	205812.	205812.	205812.	205812.	0.	1.
50000. TO 100000.	84665.	84665.	84665.	84665.	0.	1.
10000. TO 50000.	37564.	19024.	27225.	81674.	9453.	3.
0. TO 10000.	9123.	938.	5861.	41026.	2517.	7.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2072493.	1839857.	1956175.	3912350.	164495.	2.
500000. TO 1000000.	933656.	631814.	782735.	1565470.	213432.	2.
100000. TO 500000.	484302.	100019.	213429.	1280574.	150482.	6.
0. TO 100000.	93221.	26591.	59906.	119811.	47115.	2.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	136.	121.	677.	348.	16.	326.	0.	94.	4.	0.	0.	1273.
MIN	0.	3.	0.	0.	13.	0.	0.	9.	3.	0.	0.	0.
AVE	59.	22.	160.	51.	15.	175.	0.	59.	3.	0.	0.	629.
TOT	238.	202.	1280.	408.	29.	524.	0.	296.	7.	0.	0.	2518.
SD	52.	37.	216.	120.	2.	135.	0.	36.	1.	0.	0.	445.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	20.	3.	133.	34.	4.	35.	0.	3.	1.	0.	0.	46.
MIN	0.	0.	0.	0.	3.	0.	0.	1.	0.	0.	0.	0.
AVE	10.	1.	22.	5.	3.	15.	0.	2.	1.	0.	0.	23.
TOT	39.	8.	173.	40.	7.	44.	0.	9.	1.	0.	0.	92.
SD	7.	1.	45.	12.	1.	17.	0.	1.	0.	0.	0.	16.

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NEW YORK
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 873

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36300.	3.	681.	594332.	2088.
FLOW (MGD)	69403.	0.	502.	438005.	3624.
TOTAL CAPITAL COST	84741504.	1721.	522583.	456214528.	4201374.
TOTAL ANNUAL O&M COST	4721033.	20.	33289.	29061056.	234822.
TOTAL ANNUAL COST	15485341.	238.	99660.	87003440.	767009.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
29061056.	22810720.	35128496.	87000272.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	4721033.	560409.	2855633.	11422532.	2182380.	4.
100000. TO 500000.	465437.	105625.	211978.	6995290.	101885.	33.
50000. TO 100000.	98284.	50052.	66646.	2399239.	13400.	36.
10000. TO 50000.	49749.	10121.	21506.	5699087.	10108.	265.
0. TO 10000.	9966.	20.	4761.	2547330.	2508.	535.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 50000000.	105051872.	5027460.	33275392.	299478528.	42125088.	9.
1000000. TO 5000000.	4124582.	1017039.	1722558.	98185840.	694701.	57.
500000. TO 1000000.	956482.	500588.	671428.	55057104.	129268.	82.
100000. TO 500000.	492352.	100448.	214930.	101662000.	100655.	473.
0. TO 100000.	99972.	2152.	63214.	15929971.	24360.	252.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MEAN	47387.	1829.	6450.	7529.	151.	3067.	49.	4557.	33.	16948.	8508.	3193.
MIN	0.	0.	0.	0.	5.	0.	0.	5.	0.	0.	0.	0.
SD*	5479.	24.	143.	87.	23.	152.	42.	138.	3.	16948.	8508.	1936.
TOT	138667.	14101.	76580.	52291.	2111.	73051.	83.	69272.	819.	16948.	8508.	3872.
NO	12606.	117.	419.	538.	21.	310.	10.	305.	4.	0.	0.	1777.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MEAN	967.	63.	3029.	562.	160.	388.	3.	147.	18.	21.	725.	104.
MIN	0.	3.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
SD*	66.	1.	24.	6.	9.	14.	2.	4.	1.	21.	725.	65.
TOT	7688.	657.	12780.	3764.	796.	5460.	4.	2163.	195.	21.	725.	129.
NO	180.	3.	187.	39.	18.	38.	1.	12.	2.	0.	0.	55.

SD IN S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

NEW YORK
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 873

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36300.	3.	681.	594332.	2088.
FLOW (MGY)	44147.	0.	415.	362392.	2548.
TOTAL CAPITAL COST	41332192.	1721.	399281.	348572160.	2219833.
TOTAL ANNUAL O&M COST	3158657.	20.	27614.	24107184.	163497.
TOTAL ANNUAL COST	8407848.	238.	78327.	68379136.	443852.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
24107184.	17428592.	26840032.	68375808.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3158657.	560409.	2074445.	8297780.	1300199.	4.
100000. TO 500000.	434288.	101828.	189353.	6059286.	92306.	32.
50000. TO 100000.	98284.	50052.	67641.	1893950.	14337.	28.
10000. TO 50000.	48677.	10121.	21296.	5196341.	9389.	244.
0. TO 10000.	9966.	20.	4712.	2662250.	2438.	565.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	51665232.	5027460.	22128800.	177030512.	19865664.	8.
1000000. TO 5000000.	4126582.	1017039.	1733502.	91875632.	741462.	53.
500000. TO 1000000.	992622.	510207.	692506.	51245408.	142803.	74.
100000. TO 500000.	492392.	100448.	210847.	98254496.	100609.	466.
0. TO 100000.	99972.	2152.	63807.	17355632.	24168.	272.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	29195.	1305.	4806.	7529.	151.	3087.	49.	4557.	21.	10781.	8508.	2220.
MIN	0.	0.	0.	0.	5.	0.	0.	5.	0.	0.	0.	0.
AVG	1101.	21.	125.	73.	23.	189.	42.	135.	3.	10781.	8508.	1450.
TOT	61600.	12019.	66539.	43907.	2099.	71843.	83.	67538.	705.	10781.	8508.	2899.
SD	5457.	89.	319.	432.	21.	310.	10.	296.	3.	0.	0.	1090.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	666.	30.	2006.	374.	160.	388.	3.	147.	8.	15.	725.	73.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVG	33.	1.	18.	5.	9.	14.	2.	4.	1.	15.	725.	49.
TOT	1767.	502.	9548.	3101.	791.	5354.	4.	2055.	149.	15.	725.	98.
SD	120.	2.	125.	24.	10.	30.	1.	10.	1.	0.	0.	34.

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NEW YORK
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 873

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36300.	3.	681.	594332.	2088.
FLOW (MGY)	33622.	0.	352.	307101.	2028.
TOTAL CAPITAL COST	24533520.	1721.	335925.	293262592.	1528021.
TOTAL ANNUAL O&M COST	2292765.	20.	23315.	20353984.	125217.
TOTAL ANNUAL COST	5408521.	238.	65980.	57600560.	316761.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
20353984.	14663128.	22581200.	57598304.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2292765.	560409.	1641499.	6565996.	829877.	4.
100000. TO 500000.	434288.	100382.	186662.	4479886.	89315.	24.
50000. TO 100000.	98331.	50052.	70276.	2108290.	14910.	30.
10000. TO 50000.	48677.	10092.	21144.	4461291.	9372.	211.
0. TO 10000.	9966.	20.	4538.	2740741.	2419.	604.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	30666896.	5027460.	17981088.	125867648.	11810694.	7.
1000000. TO 5000000.	4435552.	1004459.	1778051.	80012336.	834889.	45.
500000. TO 1000000.	960954.	510207.	710134.	51839792.	132749.	73.
100000. TO 500000.	496718.	100448.	204745.	89064192.	100585.	435.
0. TO 100000.	99968.	2152.	63362.	19832432.	23717.	313.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	15385.	996.	3802.	7529.	126.	3087.	49.	4557.	19.	8653.	8508.	1669.
MIN	0.	0.	0.	0.	5.	0.	0.	5.	0.	0.	0.	0.
AVE	593.	18.	107.	63.	22.	182.	42.	127.	2.	8653.	8508.	1174.
TOT	33225.	10202.	57016.	37782.	1943.	69255.	83.	63673.	598.	8653.	8508.	2348.
SD	2878.	73.	255.	387.	18.	310.	10.	286.	2.	0.	0.	700.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	896.	23.	1885.	270.	115.	388.	3.	147.	5.	12.	725.	55.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	28.	1.	18.	4.	7.	14.	2.	4.	0.	12.	725.	40.
TOT	1386.	455.	7275.	2595.	661.	5164.	4.	1920.	117.	12.	725.	81.
SD	92.	1.	90.	19.	14.	38.	1.	10.	1.	0.	0.	21.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

NORTH CAROLINA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 475

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	7200.	15.	490.	232689.	655.
FLOW (MGD)	34250.	8.	412.	195476.	2181.
TOTAL CAPITAL COST	13588521.	22861.	296150.	140671472.	832269.
TOTAL ANNUAL O&M COST	721152.	1115.	15730.	7471763.	54600.
TOTAL ANNUAL COST	2463128.	4595.	53340.	25336400.	158801.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
7471763.	7033573.	10831698.	25337024.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	721152.	521322.	653270.	1959810.	114290.	3.
100000. TO 500000.	209223.	103444.	143737.	718684.	41029.	5.
50000. TO 100000.	79143.	52961.	64211.	642106.	9838.	10.
10000. TO 50000.	49452.	10065.	20897.	2382257.	10145.	114.
0. TO 10000.	9891.	1115.	5157.	1768965.	2146.	343.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	16986144.	5665775.	10189060.	40756240.	4955070.	4.
1000000. TO 5000000.	2442056.	1007640.	1456872.	36421808.	403214.	25.
500000. TO 1000000.	975229.	504275.	668471.	19385648.	129727.	29.
100000. TO 500000.	494314.	130633.	211091.	74092912.	88538.	351.
0. TO 100000.	95633.	28577.	78548.	5184185.	17116.	66.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	66.	376.	713.	3864.	47.	2902.	36.	2819.	18.	0.	5083.	621.
MIN	0.	1.	0.	0.	7.	0.	0.	12.	1.	0.	0.	0.
AVE	31.	12.	75.	48.	21.	158.	33.	110.	4.	0.	5083.	621.
TOT	218.	3449.	19983.	16916.	861.	45863.	99.	43310.	267.	0.	5083.	621.
SD	22.	26.	90.	274.	8.	268.	3.	244.	3.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	14.	4.	124.	119.	22.	481.	2.	121.	4.	0.	386.	19.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	4.	0.	5.	2.	6.	10.	1.	3.	1.	0.	386.	19.
TOT	35.	143.	1355.	871.	231.	3250.	4.	1135.	44.	0.	386.	19.
SD	4.	0.	12.	10.	4.	36.	0.	8.	1.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

NORTH CAROLINA
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 475

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	7200.	15.	490.	232689.	655.
FLOW (MGY)	21559.	8.	308.	146063.	1427.
TOTAL CAPITAL COST	8542861.	22861.	254275.	120780816.	592046.
TOTAL ANNUAL O&M COST	485575.	1013.	12823.	6090818.	38298.
TOTAL ANNUAL COST	1532655.	4203.	45115.	21429584.	112276.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
6090818.	6039040.	9300118.	21429968.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	485575.	154524.	342575.	1712877.	150015.	5.
50000. TO 100000.	95640.	51132.	64670.	452690.	16062.	7.
10000. TO 50000.	46566.	10092.	20965.	2159408.	9950.	103.
0. TO 10000.	9899.	1013.	4905.	1765896.	2157.	360.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	10678576.	5669775.	7533560.	30134240.	2182889.	4.
1000000. TO 5000000.	1958110.	1005977.	1318693.	25055168.	314089.	19.
500000. TO 1000000.	938846.	528737.	686429.	19220016.	129329.	28.
100000. TO 500000.	489309.	100898.	208388.	69810144.	90427.	335.
0. TO 100000.	99557.	28577.	75932.	6757992.	17296.	89.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	66.	376.	713.	2046.	43.	2114.	36.	1970.	16.	0.	3356.	621.
MIN	0.	1.	0.	0.	7.	0.	0.	12.	1.	0.	0.	0.
AVE	28.	11.	68.	34.	19.	141.	33.	96.	3.	0.	3356.	621.
TOT	198.	3118.	18218.	12134.	786.	44423.	98.	37604.	225.	0.	3356.	621.
SD	22.	26.	84.	168.	7.	217.	3.	185.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	16.	4.	124.	78.	19.	329.	2.	79.	4.	0.	257.	19.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	3.	0.	4.	2.	5.	0.	1.	2.	0.	0.	257.	19.
TOT	32.	135.	1175.	670.	198.	2616.	4.	952.	35.	0.	257.	19.
SD	5.	0.	10.	7.	4.	26.	0.	6.	0.	0.	0.	0.

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NORTH CAROLINA
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 475

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	7200.	15.	490.	232689.	655.
FLOW (MGY)	16190.	7.	231.	109717.	1067.
TOTAL CAPITAL COST	6975499.	13936.	211521.	100472288.	475993.
TOTAL ANNUAL O&M COST	380689.	716.	10134.	4813529.	30054.
TOTAL ANNUAL COST	1249999.	3055.	36997.	17573360.	89651.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4813529.	5023614.	7736362.	17573504.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
[illegible]	0.	0.	0.	0.	0.	0.
[illegible]	[illegible]	[illegible]	[illegible]	1346274.	121957.	5.
50000. TO 100000.	56063.	55731.	55897.	111794.	231.	2.
10000. TO 50000.	48151.	10012.	19241.	1673952.	9254.	87.
0. TO 10000.	9975.	716.	4414.	1681566.	2117.	381.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	8719373.	5454358.	6667141.	20001424.	1787070.	3.
1000000. TO 5000000.	4248167.	1051927.	1505710.	15057108.	979074.	10.
500000. TO 1000000.	965386.	519052.	699912.	19597536.	159490.	28.
100000. TO 500000.	497712.	100481.	201621.	61696080.	89090.	306.
0. TO 100000.	99930.	17421.	72184.	9239555.	18183.	128.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	87.	275.	626.	1543.	36.	1804.	32.	1639.	12.	0.	2791.	467.
MIN	0.	1.	0.	0.	6.	0.	0.	7.	0.	0.	0.	0.
AVE	20.	8.	56.	25.	15.	122.	30.	81.	2.	0.	2791.	467.
TOT	139.	2389.	15030.	8855.	649.	38276.	89.	31608.	180.	0.	2791.	467.
SD	14.	18.	67.	125.	6.	182.	2.	151.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	10.	3.	103.	61.	14.	260.	1.	61.	3.	0.	215.	14.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	3.	0.	3.	1.	3.	7.	1.	2.	0.	0.	215.	14.
TOT	22.	121.	876.	506.	139.	2092.	3.	799.	26.	0.	215.	14.
SD	4.	0.	8.	5.	3.	21.	0.	4.	0.	0.	0.	0.

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NORTH DAKOTA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 20

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	590.	18.	114.	2286.	117.
FLOW (MGD)	1179.	14.	216.	4316.	323.
TOTAL CAPITAL COST	3072230.	33863.	466177.	9323537.	811816.
TOTAL ANNUAL O&M COST	193653.	1479.	24015.	480300.	40654.
TOTAL ANNUAL COST	943826.	5786.	83219.	1664387.	143717.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
480300.	466177.	717912.	1664388.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
5 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	153653.	153653.	153653.	153653.	0.	1.
50000. TO 100000.	96602.	58733.	76802.	230406.	18994.	3.
10000. TO 50000.	15480.	10434.	12951.	51803.	2063.	4.
0. TO 10000.	8454.	1479.	3703.	44438.	2363.	12.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
5 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3846287.	1470487.	2374984.	9499937.	1051154.	4.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	425151.	126786.	226773.	1587409.	115875.	7.
0. TO 100000.	98567.	42329.	63008.	567075.	20694.	9.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	377.	143.	328.	257.	23.	689.	0.	339.	6.	0.	0.	2325.
MIN	0.	3.	0.	0.	7.	0.	0.	14.	1.	0.	0.	0.
AVG	166.	39.	84.	45.	16.	274.	0.	72.	4.	0.	0.	1568.
TOT	501.	282.	1183.	409.	47.	1098.	0.	1011.	11.	0.	0.	4705.
SD	137.	47.	94.	91.	8.	261.	0.	89.	3.	0.	0.	715.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	37.	3.	30.	13.	7.	93.	0.	7.	1.	0.	0.	81.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVG	19.	1.	8.	3.	4.	18.	0.	2.	1.	0.	0.	55.
TOT	75.	6.	88.	26.	12.	73.	0.	28.	2.	0.	0.	166.
SD	15.	1.	9.	4.	3.	23.	0.	2.	1.	0.	0.	25.

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NORTH DAKOTA
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 20

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	530.	18.	114.	2286.	117.
FLOW (MGY)	848.	10.	160.	3197.	232.
TOTAL CAPITAL COST	2358714.	26926.	369417.	7388331.	625117.
TOTAL ANNUAL O&M COST	118398.	1166.	18888.	377752.	31182.
TOTAL ANNUAL COST	417955.	4585.	65803.	1316068.	110533.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
377752.	369417.	568901.	1316069.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	118398.	118398.	118398.	118398.	0.	1.
50000. TO 100000.	78510.	57474.	65992.	131983.	12046.	2.
10000. TO 50000.	45354.	12812.	23812.	71436.	18657.	3.
0. TO 10000.	9393.	1166.	3995.	55935.	2980.	14.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2948392.	1142232.	1845448.	7381795.	791933.	4.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	377110.	102761.	196207.	1373447.	102783.	7.
0. TO 100000.	80179.	33650.	53352.	480172.	19319.	9.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	220.	112.	368.	186.	19.	574.	0.	274.	5.	0.	0.	1802.
MIN	0.	2.	0.	0.	7.	0.	0.	11.	1.	0.	0.	0.
AVE	105.	22.	72.	38.	13.	233.	0.	58.	3.	0.	0.	1215.
SUM	491.	222.	1019.	304.	40.	933.	0.	819.	9.	0.	0.	3646.
SD	91.	33.	78.	58.	6.	233.	0.	72.	2.	0.	0.	554.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	28.	2.	22.	9.	5.	40.	0.	6.	1.	0.	0.	64.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	14.	1.	5.	2.	3.	16.	0.	2.	0.	0.	0.	43.
SUM	57.	8.	79.	21.	9.	57.	0.	24.	1.	0.	0.	130.
SD	12.	1.	7.	3.	2.	17.	0.	1.	0.	0.	0.	19.

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NORTH DAKOTA

FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 20

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	530.	18.	114.	2286.	117.
FLOW (MGD)	590.	8.	116.	2326.	160.
TOTAL CAPITAL COST	1762266.	23195.	288005.	5760095.	467220.
TOTAL ANNUAL O&M COST	88510.	1005.	14582.	291639.	23112.
TOTAL ANNUAL COST	312445.	3951.	51159.	1023171.	82400.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
291639.	288005.	443527.	1023170.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	88510.	55765.	72137.	144275.	23154.	2.
10000. TO 50000.	42026.	10609.	24623.	98493.	16065.	4.
0. TO 10000.	8090.	1005.	3491.	48871.	2595.	14.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2204082.	1118028.	1573251.	4719755.	563921.	3.
500000. TO 1000000.	863271.	863271.	863271.	863271.	0.	1.
100000. TO 500000.	316650.	126786.	199733.	998663.	79934.	5.
0. TO 100000.	95909.	28993.	56221.	618438.	25103.	11.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MEAN	100.	60.	210.	128.	17.	466.	0.	215.	6.	0.	0.	1358.
S.D.	0.	2.	0.	0.	7.	0.	0.	9.	1.	0.	0.	0.
SUM	68.	17.	62.	20.	12.	193.	0.	48.	2.	0.	0.	913.
SUM	273.	172.	840.	299.	36.	773.	0.	672.	7.	0.	0.	2740.
SD	59.	25.	62.	40.	9.	187.	0.	57.	1.	0.	0.	416.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MEAN	29.	2.	56.	7.	8.	29.	0.	9.	1.	0.	0.	69.
S.D.	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
SUM	19.	2.	8.	2.	2.	11.	0.	1.	0.	0.	0.	33.
SUM	83.	7.	57.	16.	7.	43.	0.	20.	1.	0.	0.	98.
SD	9.	0.	9.	2.	1.	13.	0.	1.	0.	0.	0.	15.

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OHIO
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1074

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20000.	11.	812.	872371.	1726.
FLOW (MGY)	31231.	2.	475.	510591.	2013.
TOTAL CAPITAL COST	25071040.	10073.	384300.	412737792.	1386280.
TOTAL ANNUAL O&M COST	2565944.	637.	42526.	45672592.	164565.
TOTAL ANNUAL COST	5749965.	1916.	91338.	98096912.	337840.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
45672592.	20636880.	31780784.	98090256.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2565944.	513217.	1285359.	16709616.	707967.	13.
100000. TO 500000.	480314.	100740.	193788.	12790027.	83763.	66.
50000. TO 100000.	96557.	50622.	69656.	4527660.	13765.	65.
10000. TO 50000.	49789.	10008.	20926.	9019228.	10213.	431.
0. TO 10000.	9994.	637.	5271.	2629692.	2563.	499.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	31338900.	5437341.	15448171.	154481712.	8542859.	10.
1000000. TO 5000000.	4593561.	1008279.	1948081.	148054176.	879766.	76.
500000. TO 1000000.	991339.	501016.	687251.	62539840.	132445.	91.
100000. TO 500000.	494549.	100205.	211163.	134088640.	97994.	635.
0. TO 100000.	98915.	12591.	64243.	16831600.	21628.	262.

DISTRIBUTION OF TOTAL CAPITAL COST PER TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	15911.	1008.	3841.	3279.	152.	1531.	83.	1325.	44.	7323.	0.	2236.
MIN	0.	1.	0.	0.	5.	0.	0.	6.	0.	0.	0.	0.
AVE	714.	29.	168.	65.	19.	140.	41.	103.	4.	7323.	0.	1252.
TOT	72068.	22996.	139794.	55145.	1533.	52573.	290.	47567.	1463.	7323.	0.	11631.
SD	2425.	77.	315.	227.	20.	169.	20.	161.	4.	0.	0.	691.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	553.	26.	1618.	302.	343.	261.	16.	67.	30.	13.	0.	90.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	50.	1.	31.	7.	11.	11.	4.	4.	1.	13.	0.	53.
TOT	5074.	1059.	25439.	6139.	879.	4237.	29.	1865.	464.	13.	0.	479.
SD	109.	2.	116.	22.	39.	22.	5.	7.	2.	0.	0.	28.

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OHIO
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1074

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20000.	11.	812.	872371.	1726.
FLOW (MGY)	29431.	2.	397.	426018.	1794.
TOTAL CAPITAL COST	21976576.	10060.	335836.	360688384.	1207661.
TOTAL ANNUAL O&M COST	2434750.	636.	36029.	38695056.	148627.
TOTAL ANNUAL COST	5225774.	1914.	78686.	84508480.	299504.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
38695056.	18034416.	27772976.	84502448.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2434750.	592395.	1296732.	14264062.	618170.	11.
100000. TO 500000.	391854.	100360.	187561.	10690985.	78256.	57.
50000. TO 100000.	99501.	50475.	68722.	3092511.	13898.	45.
10000. TO 50000.	49773.	10002.	20696.	7533364.	10217.	364.
0. TO 10000.	9972.	636.	5223.	3117881.	2449.	597.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	27470720.	5437341.	13628254.	136282544.	6911211.	10.
1000000. TO 5000000.	4593561.	1008279.	1842534.	127134848.	848604.	69.
500000. TO 1000000.	992870.	510433.	689738.	46212416.	137762.	67.
100000. TO 500000.	495560.	100157.	201510.	119294000.	95570.	592.
0. TO 100000.	99509.	12575.	65504.	22009392.	21459.	336.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	13566.	917.	3516.	2941.	144.	1531.	81.	1325.	30.	7323.	0.	2236.
MIN	0.	1.	0.	0.	5.	0.	0.	6.	0.	0.	0.	0.
AVE	602.	24.	143.	52.	19.	130.	41.	100.	3.	7323.	0.	1292.
TOT	60802.	19251.	118959.	44592.	1524.	49320.	287.	45955.	1091.	7323.	0.	11631.
SD	1987.	70.	287.	199.	19.	165.	19.	155.	3.	0.	0.	691.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	526.	25.	1533.	287.	313.	261.	15.	64.	18.	13.	0.	90.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	46.	1.	25.	6.	11.	10.	4.	4.	1.	13.	0.	53.
TOT	4673.	935.	20879.	4954.	847.	3801.	27.	1785.	301.	13.	0.	479.
SD	97.	2.	104.	20.	36.	21.	5.	7.	1.	0.	0.	28.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

OHIO

FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1074

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20000.	11.	812.	872371.	1726.
FLOW (MGY)	20497.	1.	299.	321192.	1276.
TOTAL CAPITAL COST	13719141.	8101.	269113.	289027584.	818147.
TOTAL ANNUAL O&M COST	1769103.	530.	28033.	30107312.	108979.
TOTAL ANNUAL COST	3511433.	1559.	62212.	66815616.	210491.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
30107312.	14451378.	22255104.	66813792.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1769103.	515801.	1057045.	9513406.	414777.	9.
100000. TO 500000.	432316.	100740.	178912.	8229935.	80625.	46.
50000. TO 100000.	99175.	50084.	72134.	2813207.	15626.	39.
10000. TO 50000.	49924.	10027.	20438.	6274466.	9912.	307.
0. TO 10000.	9971.	530.	4874.	3279950.	2340.	673.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	17148912.	6432832.	10293268.	82346144.	3695019.	8.
1000000. TO 5000000.	4777005.	1004449.	1802140.	108128400.	916047.	60.
500000. TO 1000000.	991339.	503251.	691340.	42171760.	137416.	61.
100000. TO 500000.	491542.	100066.	192899.	102236320.	91707.	530.
0. TO 100000.	99483.	10127.	63689.	26430784.	20804.	415.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	7354.	700.	2784.	2059.	118.	1531.	73.	1325.	25.	5878.	0.	2236.
MIN	0.	0.	0.	0.	5.	0.	0.	6.	0.	0.	0.	0.
AVE	350.	19.	119.	39.	18.	120.	39.	89.	2.	5878.	0.	1285.
TOT	35373.	15209.	98516.	33398.	1443.	45335.	276.	41173.	878.	5878.	0.	11564.
SD	1091.	54.	230.	143.	17.	156.	17.	137.	2.	0.	0.	685.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	391.	19.	1105.	207.	218.	261.	11.	59.	18.	11.	0.	90.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	35.	1.	19.	4.	9.	9.	3.	3.	1.	11.	0.	53.
TOT	3542.	809.	15613.	3766.	712.	3370.	23.	1567.	222.	11.	0.	476.
SD	72.	1.	76.	14.	26.	20.	4.	6.	1.	0.	0.	28.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

CKLAHCMA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 119

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	9110.	15.	370.	43986.	710.
FLOW (MGY)	1765.	3.	137.	16297.	264.
TOTAL CAPITAL COST	4051073.	12695.	189223.	22517488.	403259.
TOTAL ANNUAL O&M COST	221585.	767.	13754.	1636677.	26754.
TOTAL ANNUAL COST	736075.	2375.	37785.	4496448.	76285.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1636677.	1125674.	1733845.	4496396.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	221589.	137568.	179593.	359186.	59391.	2.
50000. TO 100000.	85855.	51963.	67491.	269965.	17596.	4.
10000. TO 50000.	45261.	10854.	22290.	668714.	10510.	30.
0. TO 10000.	9335.	767.	4082.	338830.	1906.	83.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	5063841.	5063841.	5063841.	5063841.	0.	1.
1000000. TO 5000000.	1231662.	1018789.	1104937.	4419751.	93762.	4.
500000. TO 1000000.	962079.	634716.	748279.	3741397.	128411.	5.
100000. TO 500000.	475213.	131659.	206158.	11544826.	104470.	56.
0. TO 100000.	99243.	15868.	63728.	3377586.	22932.	53.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	521.	83.	447.	127.	37.	332.	0.	293.	13.	0.	0.	3010.
MIN	0.	1.	0.	0.	4.	0.	0.	10.	0.	0.	0.	0.
AVE	67.	10.	86.	15.	13.	68.	0.	51.	2.	0.	0.	667.
TOT	1003.	717.	7024.	1225.	138.	2933.	0.	2747.	65.	0.	0.	6665.
SD	131.	14.	93.	24.	9.	54.	0.	50.	2.	0.	0.	848.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	54.	3.	80.	15.	20.	17.	0.	9.	4.	0.	0.	116.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	10.	1.	9.	2.	4.	3.	0.	2.	0.	0.	0.	26.
TOT	151.	46.	736.	150.	42.	139.	0.	95.	14.	0.	0.	263.
SD	15.	0.	15.	3.	5.	3.	0.	1.	1.	0.	0.	32.

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OKLAHOMA
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 119

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5110.	15.	370.	43986.	710.
FLOW (MGY)	1765.	3.	117.	13978.	224.
TOTAL CAPITAL COST	4051073.	12695.	179618.	21374528.	398026.
TOTAL ANNUAL O&M COST	221589.	767.	12405.	1476138.	24853.
TOTAL ANNUAL COST	736075.	2379.	35216.	4190745.	74248.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1476138.	1068726.	1645837.	4190701.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	221589.	125229.	173409.	346818.	68136.	2.
50000. TO 100000.	58402.	51963.	54426.	163278.	3477.	3.
10000. TO 50000.	45201.	10854.	20415.	632850.	9930.	31.
0. TO 10000.	8936.	767.	4015.	333212.	1876.	83.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	5063841.	5063841.	5063841.	5063841.	0.	1.
1000000. TO 5000000.	1201662.	1030590.	1102304.	3306914.	88820.	3.
500000. TO 1000000.	962079.	500739.	740661.	3703304.	165332.	5.
100000. TO 500000.	475213.	103257.	200333.	11218630.	101041.	56.
0. TO 100000.	99243.	15868.	63444.	3425975.	22588.	54.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	521.	76.	417.	114.	37.	261.	0.	293.	13.	0.	0.	3010.
MIN	0.	1.	0.	0.	4.	0.	0.	10.	0.	0.	0.	0.
AVE	66.	9.	78.	12.	12.	66.	0.	49.	2.	0.	0.	667.
TOT	984.	647.	6366.	1025.	136.	2840.	0.	2649.	63.	0.	0.	6665.
SD	130.	12.	78.	19.	9.	46.	0.	47.	2.	0.	0.	848.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	54.	3.	73.	14.	20.	12.	0.	9.	4.	0.	0.	116.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	10.	1.	7.	2.	4.	3.	0.	2.	0.	0.	0.	26.
TOT	148.	44.	614.	128.	40.	132.	0.	92.	14.	0.	0.	263.
SD	15.	0.	12.	2.	5.	3.	0.	1.	1.	0.	0.	32.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

OKLAHOMA
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 119

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5110.	15.	370.	43986.	710.
FLOW (MGY)	1765.	3.	95.	11268.	193.
TOTAL CAPITAL COST	4051073.	12695.	164600.	19587424.	394138.
TOTAL ANNUAL O&M COST	221589.	767.	10676.	1270387.	23066.
TOTAL ANNUAL COST	736075.	2379.	31580.	3758015.	72507.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1270387.	979371.	1508230.	3757988.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	221589.	221589.	221589.	221589.	0.	1.
50000. TO 100000.	91902.	52913.	72408.	144815.	27570.	2.
10000. TO 50000.	45201.	10854.	21083.	548159.	10321.	26.
0. TO 10000.	9585.	767.	3954.	355838.	2034.	90.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	5063841.	5063841.	5063841.	5063841.	0.	1.
1000000. TO 5000000.	1201662.	1030590.	1116126.	2232252.	120966.	2.
500000. TO 1000000.	962079.	543149.	758762.	3793811.	153661.	5.
100000. TO 500000.	435457.	104717.	196047.	9410246.	95714.	48.
0. TO 100000.	99243.	15868.	63246.	3984501.	22371.	63.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	521.	58.	397.	80.	35.	191.	0.	268.	12.	0.	0.	3010.
MIN	0.	1.	0.	0.	4.	0.	0.	10.	0.	0.	0.	0.
AVE	63.	8.	67.	10.	11.	60.	0.	44.	2.	0.	0.	667.
TOT	940.	562.	5491.	793.	126.	2585.	0.	2367.	58.	0.	0.	6665.
SD	129.	10.	65.	14.	9.	40.	0.	42.	2.	0.	0.	848.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	54.	2.	53.	10.	18.	10.	0.	8.	3.	0.	0.	116.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	9.	1.	6.	1.	3.	3.	0.	2.	0.	0.	0.	26.
TOT	139.	41.	479.	101.	36.	115.	0.	84.	12.	0.	0.	263.
SD	14.	0.	9.	2.	5.	2.	0.	1.	1.	0.	0.	32.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

OREGON
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 201

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5900.	15.	328.	65832.	495.
FLOW (MGY)	36569.	6.	1073.	215577.	3559.
TOTAL CAPITAL COST	23848256.	23372.	860594.	172979488.	2361881.
TOTAL ANNUAL OGM COST	1665790.	1434.	57347.	11526662.	166847.
TOTAL ANNUAL COST	4654517.	4403.	166641.	33494784.	465226.

ANNUAL COST OF WASTE TREATMENT

OGM	REPLACEMENT	INTEREST	TOTAL
11526662.	8648573.	13319414.	33495040.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1665790.	779235.	1278798.	3836395.	453872.	3.
100000. TO 500000.	373548.	103713.	212560.	2763277.	95061.	13.
50000. TO 100000.	97355.	52723.	70232.	1685563.	15207.	24.
10000. TO 50000.	49874.	10046.	26667.	2960040.	9714.	111.
0. TO 10000.	6506.	1434.	5628.	281416.	2153.	50.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	29810320.	7762902.	19147360.	76589488.	10042812.	4.
1000000. TO 5000000.	4959588.	1041225.	1887572.	67952592.	987385.	36.
500000. TO 1000000.	976015.	508154.	705082.	54996432.	123560.	78.
100000. TO 500000.	493401.	101583.	236504.	15372728.	108218.	65.
0. TO 100000.	99104.	29216.	72991.	1313832.	15818.	18.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	76.	255.	1052.	7760.	53.	3054.	0.	4546.	8.	5228.	8489.	868.
MIN	0.	1.	0.	0.	6.	0.	0.	18.	0.	0.	0.	0.
AVE	31.	28.	161.	216.	19.	372.	0.	303.	3.	5228.	6711.	868.
TOT	157.	2171.	7905.	30709.	227.	55757.	0.	49758.	65.	5228.	20134.	868.
SD	33.	45.	207.	855.	12.	462.	0.	516.	2.	0.	2112.	0.

DISTRIBUTION OF ANNUAL OGM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	14.	6.	243.	251.	24.	358.	0.	176.	2.	9.	841.	34.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	5.	1.	23.	12.	6.	33.	0.	10.	1.	9.	668.	34.
TOT	25.	87.	1108.	1674.	67.	4622.	0.	1582.	13.	9.	2005.	34.
SD	6.	1.	45.	29.	6.	54.	0.	19.	1.	0.	206.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

OREGON
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 201

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5900.	15.	328.	65832.	495.
FLOW (MGY)	15838.	5.	447.	89907.	1530.
TOTAL CAPITAL COST	12830877.	19766.	479965.	96472880.	1279157.
TOTAL ANNUAL O&M COST	889750.	1189.	29511.	5931615.	89457.
TOTAL ANNUAL COST	2519270.	3699.	90466.	18183648.	251151.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
5931615.	4823643.	7428408.	18183664.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	889750.	746401.	818075.	1636150.	101371.	2.
100000. TO 500000.	423465.	113613.	194724.	1363065.	106102.	7.
50000. TO 100000.	94447.	50137.	73271.	659442.	18501.	9.
10000. TO 50000.	48079.	10090.	18447.	1734063.	8615.	94.
0. TO 10000.	9968.	1189.	6055.	538931.	2725.	89.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	16038596.	7745056.	12425594.	37276784.	4248561.	3.
1000000. TO 5000000.	3944678.	1039375.	1905781.	26680944.	814402.	14.
500000. TO 1000000.	929702.	500594.	663462.	19903856.	124877.	30.
100000. TO 500000.	487852.	101556.	277649.	34706160.	109304.	125.
0. TO 100000.	97946.	24707.	69796.	2024082.	20744.	29.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	76.	196.	701.	3365.	47.	1910.	0.	2636.	6.	2568.	4920.	868.
MIN	0.	1.	0.	0.	6.	0.	0.	13.	0.	0.	0.	0.
AVE	29.	20.	116.	90.	16.	222.	0.	169.	2.	2568.	3890.	868.
TOT	145.	1562.	5696.	12740.	193.	33328.	0.	27652.	52.	2568.	11670.	868.
SD	31.	31.	142.	372.	11.	255.	0.	300.	2.	0.	1224.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	14.	4.	137.	117.	19.	198.	0.	81.	2.	5.	494.	34.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	5.	1.	14.	5.	4.	16.	0.	5.	0.	5.	393.	34.
TOT	24.	72.	673.	742.	50.	2326.	0.	818.	10.	5.	1178.	34.
SD	6.	1.	26.	14.	5.	27.	0.	9.	0.	0.	121.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

OREGON

FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 201

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5900.	15.	328.	65832.	495.
FLOW (MGY)	11893.	4.	356.	71550.	1150.
TOTAL CAPITAL COST	10451767.	17061.	417203.	83857808.	1043777.
TOTAL ANNUAL O&M COST	722286.	1014.	24601.	4944770.	72371.
TOTAL ANNUAL COST	2049659.	3181.	77586.	15594813.	204391.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4944770.	4192890.	6457048.	15594708.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	722286.	606718.	664502.	1329003.	81723.	2.
100000. TO 500000.	345590.	102812.	165671.	994026.	91006.	6.
50000. TO 100000.	83606.	60890.	73359.	440155.	7753.	6.
10000. TO 50000.	48079.	10076.	18295.	1628234.	8934.	89.
0. TO 10000.	9968.	1014.	5647.	553390.	2797.	98.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	13064708.	6352575.	10142501.	30427504.	3439177.	3.
1000000. TO 5000000.	3205071.	1039375.	1731709.	20780512.	601175.	12.
500000. TO 1000000.	990183.	500791.	669455.	16736381.	135506.	25.
100000. TO 500000.	490069.	104170.	285553.	33980768.	106141.	119.
0. TO 100000.	97727.	21327.	68995.	2897796.	21803.	42.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	76.	148.	587.	2537.	31.	1630.	0.	2193.	6.	2061.	4092.	868.
MIN	0.	1.	0.	0.	6.	0.	0.	11.	0.	0.	0.	0.
AVE	24.	16.	91.	71.	13.	203.	0.	150.	2.	2061.	3235.	868.
TOT	121.	1222.	4476.	10092.	161.	30453.	0.	24656.	42.	2061.	9706.	868.
SD	30.	25.	113.	280.	7.	217.	0.	249.	1.	0.	1018.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	14.	3.	106.	90.	9.	156.	0.	63.	2.	4.	413.	34.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	4.	1.	10.	4.	3.	13.	0.	4.	0.	4.	328.	34.
TOT	20.	63.	474.	610.	34.	1995.	0.	719.	7.	4.	984.	34.
SD	6.	1.	19.	11.	2.	21.	0.	7.	0.	0.	101.	0.

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PENNSYLVANIA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1092

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28600.	15.	674.	735645.	1584.
FLOW (MGY)	39242.	0.	545.	595640.	2357.
TOTAL CAPITAL COST	52425024.	2625.	522213.	570256384.	2581258.
TOTAL ANNUAL O&M COST	2774672.	253.	42652.	46576032.	176180.
TOTAL ANNUAL COST	8204226.	586.	108979.	119005232.	485102.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
46576032.	28512816.	43909712.	118998560.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2774672.	504294.	1147662.	21805584.	616813.	19.
100000. TO 500000.	499543.	100787.	238805.	12179035.	115691.	51.
50000. TO 100000.	95322.	50076.	71366.	2783274.	15276.	39.
10000. TO 50000.	49531.	10013.	20925.	6800699.	10304.	325.
0. TO 10000.	9943.	253.	4575.	3010511.	2536.	658.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	65531280.	5185580.	17674736.	335820032.	17218720.	19.
1000000. TO 5000000.	4608757.	1037946.	2322985.	174223904.	988438.	75.
500000. TO 1000000.	995335.	505355.	696928.	57148096.	145878.	82.
100000. TO 500000.	465109.	100216.	218868.	124535648.	99899.	569.
0. TO 100000.	99799.	3281.	61018.	21173376.	22676.	347.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	24744.	1137.	4235.	3905.	58.	1757.	29.	1543.	29.	2929.	0.	24158.
MIN	0.	0.	0.	0.	4.	0.	0.	5.	0.	0.	0.	0.
AVE	1268.	31.	174.	75.	18.	151.	29.	122.	3.	2475.	0.	5692.
TOT	143246.	23141.	133766.	59964.	1473.	68423.	29.	71978.	724.	4950.	0.	62616.
SD	3905.	91.	379.	267.	12.	216.	0.	190.	2.	642.	0.	8548.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	589.	27.	1758.	328.	30.	263.	1.	73.	12.	6.	0.	724.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	64.	1.	31.	7.	5.	11.	1.	4.	1.	5.	0.	177.
TOT	7178.	852.	23420.	5361.	407.	4852.	1.	2401.	149.	9.	0.	1945.
SD	107.	2.	123.	23.	6.	27.	0.	8.	1.	1.	0.	254.

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PENNSYLVANIA
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1092

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28600.	15.	674.	735645.	1584.
FLOW (MGY)	39242.	0.	518.	565796.	2288.
TOTAL CAPITAL COST	32999680.	2625.	471786.	515190528.	1989432.
TOTAL ANNUAL O&M COST	2774672.	253.	40488.	44213104.	169917.
TOTAL ANNUAL COST	6965630.	586.	100409.	109646592.	412775.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
44213104.	25759520.	39669648.	109642272.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2774672.	504294.	1100434.	20908256.	609546.	19.
100000. TO 500000.	446479.	100787.	231931.	11596533.	104803.	50.
50000. TO 100000.	99293.	50076.	71862.	2730748.	14685.	38.
10000. TO 50000.	49334.	10048.	20462.	5770225.	9805.	282.
0. TO 10000.	9908.	253.	4567.	3210317.	2501.	703.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	41249600.	5185580.	14872549.	282578432.	11545225.	19.
1000000. TO 5000000.	4608797.	1037946.	2269461.	170209616.	972852.	75.
500000. TO 1000000.	995335.	511165.	705858.	51527616.	146778.	73.
100000. TO 500000.	495109.	100387.	211576.	117001600.	97999.	553.
0. TO 100000.	99799.	3281.	61101.	22729552.	22368.	372.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	22476.	1137.	4235.	3905.	58.	1757.	29.	1543.	29.	2929.	0.	16799.
MIN	0.	0.	0.	0.	4.	0.	0.	5.	0.	0.	0.	0.
AVE	1048.	30.	165.	72.	18.	147.	29.	120.	2.	2475.	0.	4129.
TOT	118438.	22257.	126914.	57283.	1464.	66758.	29.	71048.	661.	4950.	0.	45423.
SD	3036.	90.	370.	264.	12.	216.	0.	190.	2.	642.	0.	5847.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	589.	27.	1758.	328.	30.	263.	1.	73.	12.	6.	0.	509.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	61.	1.	29.	6.	5.	10.	1.	4.	0.	5.	0.	131.
TOT	6847.	826.	22346.	5119.	403.	4722.	1.	2374.	130.	9.	0.	1436.
SD	102.	2.	122.	23.	6.	27.	0.	8.	1.	1.	0.	175.

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PENNSYLVANIA
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1092

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28600.	15.	674.	735645.	1584.
FLOW (MGY)	27329.	0.	404.	441332.	1655.
TOTAL CAPITAL COST	206370082.	2625.	376580.	411225344.	1327521.
TOTAL ANNUAL O&M COST	2014635.	253.	32340.	35315824.	125795.
TOTAL ANNUAL COST	4539849.	586.	80170.	87545712.	286945.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
35315824.	20561264.	31664320.	87541408.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2014635.	530480.	919923.	13798852.	431286.	15.
100000. TO 500000.	463782.	107054.	226505.	10419209.	93419.	46.
50000. TO 100000.	99001.	50076.	71527.	2861083.	14692.	40.
10000. TO 50000.	49049.	10107.	20446.	4947879.	10262.	242.
0. TO 10000.	9989.	253.	4395.	3291770.	2437.	749.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	25796256.	5159936.	11187260.	178996160.	7269135.	16.
1000000. TO 5000000.	4542977.	1037946.	2118488.	156768112.	880265.	74.
500000. TO 1000000.	977606.	511165.	690008.	48300544.	143492.	70.
100000. TO 500000.	495109.	100145.	202528.	104909536.	96195.	518.
0. TO 100000.	99799.	3281.	60667.	25115952.	22572.	414.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	11942.	868.	3351.	2734.	58.	1757.	28.	1543.	21.	2351.	0.	12627.
MIN	0.	0.	0.	0.	4.	0.	0.	5.	0.	0.	0.	0.
AVE	609.	25.	143.	56.	17.	138.	28.	110.	2.	2186.	0.	3232.
TOT	68818.	18563.	109452.	44970.	1408.	62716.	28.	64802.	579.	4372.	0.	35554.
SD	1644.	71.	300.	192.	12.	206.	0.	172.	2.	233.	0.	4326.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	438.	21.	1267.	237.	30.	263.	1.	60.	8.	5.	0.	386.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	47.	1.	22.	5.	5.	9.	1.	4.	0.	4.	0.	104.
TOT	5261.	734.	17247.	4047.	380.	4289.	1.	2103.	107.	8.	0.	1140.
SD	76.	2.	89.	17.	6.	25.	0.	6.	1.	1.	0.	130.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

RHODE ISLAND
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 125

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3000.	10.	388.	48694.	514.
FLOW (MGY)	1347.	3.	118.	14750.	181.
TOTAL CAPITAL COST	1608660.	8881.	157948.	19743504.	148840.
TOTAL ANNUAL OEM COST	79313.	666.	8903.	1112833.	12337.
TOTAL ANNUAL COST	276191.	1947.	28962.	3620254.	36829.

ANNUAL COST OF WASTE TREATMENT

OEM	REPLACEMENT	INTEREST	TOTAL
1112833.	987175.	1920249.	3620257.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	79313.	71884.	74874.	224622.	3921.	3.
10000. TO 50000.	37215.	11000.	17756.	461661.	6935.	26.
0. TO 10000.	9996.	669.	4443.	426554.	2586.	96.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2016800.	1419950.	1715295.	3430590.	417766.	2.
500000. TO 1000000.	834330.	600511.	722281.	3611406.	126847.	5.
100000. TO 500000.	463887.	102630.	232182.	14961475.	89314.	14.
0. TO 100000.	98370.	11101.	60918.	2675996.	26619.	44.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	124.	73.	362.	137.	62.	354.	0.	469.	7.	0.	0.	1237.
MIN	0.	0.	10.	0.	0.	0.	0.	4.	0.	0.	0.	0.
AVE	45.	9.	63.	12.	20.	84.	0.	59.	2.	0.	0.	1237.
TOT	363.	746.	5065.	1185.	142.	5734.	0.	4386.	65.	0.	0.	1237.
SD	50.	11.	62.	19.	21.	74.	0.	60.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL OEM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	20.	2.	45.	9.	24.	25.	0.	9.	2.	0.	0.	39.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	7.	1.	4.	1.	7.	4.	0.	2.	0.	0.	0.	39.
TOT	84.	46.	390.	117.	49.	277.	0.	128.	13.	0.	0.	39.
SD	8.	0.	6.	1.	10.	5.	0.	2.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

RHODE ISLAND
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 125

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3000.	10.	388.	48494.	514.
FLOW (MGY)	1347.	3.	106.	13296.	173.
TOTAL CAPITAL COST	1135992.	8881.	145354.	18169200.	171148.
TOTAL ANNUAL O&M COST	79313.	669.	8131.	1016405.	11349.
TOTAL ANNUAL COST	217696.	1947.	26591.	3323881.	32386.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1016405.	908460.	1399027.	3323892.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	79313.	73425.	76369.	152738.	4164.	2.
10000. TO 50000.	49718.	11000.	17886.	465034.	9122.	26.
0. TO 10000.	9443.	669.	4110.	398633.	2320.	97.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1419990.	1399692.	1409841.	2819682.	14336.	2.
500000. TO 1000000.	884330.	597284.	703676.	3518380.	142216.	5.
100000. TO 500000.	463887.	104040.	192035.	13250427.	84975.	69.
0. TO 100000.	98287.	11101.	63738.	3123180.	26993.	49.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	95.	73.	362.	137.	62.	359.	0.	469.	6.	0.	0.	860.
MIN	0.	0.	9.	0.	0.	0.	0.	4.	0.	0.	0.	0.
AVE	39.	8.	58.	11.	20.	81.	0.	56.	2.	0.	0.	860.
TOT	316.	674.	5425.	1078.	142.	5491.	0.	4125.	58.	0.	0.	860.
SD	41.	11.	58.	19.	21.	71.	0.	69.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	20.	2.	45.	8.	28.	23.	0.	9.	2.	0.	0.	28.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	6.	1.	4.	1.	7.	4.	0.	2.	0.	0.	0.	28.
TOT	49.	44.	350.	107.	49.	259.	0.	121.	11.	0.	0.	28.
SD	7.	0.	6.	1.	10.	5.	0.	1.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

RHODE ISLAND
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 125

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3000.	10.	388.	48494.	514.
FLOW (MGY)	1347.	3.	91.	11369.	159.
TOTAL CAPITAL COST	1135992.	8881.	131027.	16378401.	151912.
TOTAL ANNUAL O&M COST	79313.	669.	7206.	900713.	10537.
TOTAL ANNUAL COST	217696.	1947.	23846.	2980780.	29201.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
900713.	818920.	1261136.	2980769.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	79313.	73425.	76369.	152738.	4164.	2.
10000. TO 50000.	37247.	10431.	16045.	352991.	6421.	22.
0. TO 10000.	9875.	669.	3911.	394985.	2238.	101.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1419990.	1056449.	1238219.	2476439.	257061.	2.
500000. TO 1000000.	884330.	502827.	620061.	3100305.	168880.	5.
100000. TO 500000.	463887.	100611.	177459.	11534803.	75170.	65.
0. TO 100000.	97839.	11101.	63424.	3361459.	25471.	53.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	95.	73.	362.	137.	62.	306.	0.	469.	5.	0.	0.	647.
MIN	0.	0.	8.	0.	0.	0.	0.	4.	0.	0.	0.	0.
AVE	37.	7.	54.	9.	20.	73.	0.	50.	2.	0.	0.	647.
TOT	293.	614.	5030.	934.	142.	4934.	0.	3734.	50.	0.	0.	647.
SD	39.	10.	55.	17.	21.	61.	0.	65.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	20.	2.	45.	8.	28.	18.	0.	9.	1.	0.	0.	21.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	6.	0.	3.	1.	7.	3.	0.	1.	0.	0.	0.	21.
TOT	46.	42.	313.	93.	49.	213.	0.	111.	9.	0.	0.	21.
SD	7.	0.	6.	1.	10.	4.	0.	1.	0.	0.	0.	0.

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SOUTH CAROLINA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 258

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	6050.	7.	621.	160235.	684.
FLOW (MGY)	47153.	5.	742.	191393.	3628.
TOTAL CAPITAL COST	13588921.	18065.	434321.	112054832.	1207398.
TOTAL ANNUAL O&M COST	968825.	938.	24974.	6443223.	88053.
TOTAL ANNUAL COST	2457256.	4092.	80131.	20673856.	238679.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
6443223.	5602741.	8428217.	20674176.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	968825.	502207.	734179.	2202536.	233322.	3.
100000. TO 500000.	431585.	110565.	220739.	1324433.	110638.	6.
50000. TO 100000.	87810.	56543.	70304.	492128.	10004.	7.
10000. TO 50000.	48059.	10011.	17749.	1597427.	7641.	90.
0. TO 10000.	5944.	938.	5439.	826753.	2349.	152.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	16986144.	6015816.	10593304.	43973216.	5071617.	4.
1000000. TO 5000000.	3982523.	1199966.	2099220.	29389088.	977379.	14.
500000. TO 1000000.	993253.	521277.	676243.	18258560.	133596.	27.
100000. TO 500000.	449309.	102121.	253290.	46352032.	106376.	183.
0. TO 100000.	95988.	22582.	69874.	2096211.	21711.	30.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	464.	399.	1276.	3864.	112.	3466.	42.	3464.	8.	0.	5083.	1597.
MIN	0.	1.	0.	0.	8.	0.	0.	9.	0.	0.	0.	0.
AVE	143.	19.	109.	77.	28.	220.	35.	164.	3.	0.	5083.	1597.
TOT	1003.	2144.	10638.	15753.	569.	40213.	104.	34845.	106.	0.	5083.	1597.
SD	171.	45.	156.	401.	25.	364.	6.	360.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	31.	4.	269.	162.	84.	639.	2.	169.	1.	0.	393.	47.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	14.	1.	8.	4.	14.	16.	2.	5.	1.	0.	393.	47.
TOT	99.	70.	858.	743.	274.	2978.	5.	959.	18.	0.	393.	47.
SD	13.	1.	27.	15.	22.	56.	1.	14.	0.	0.	0.	0.

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SOUTH CAROLINA
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 258

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	6050.	7.	621.	160235.	684.
FLOW (MGY)	24756.	5.	500.	129088.	1994.
TOTAL CAPITAL COST	8542861.	17374.	358897.	92595424.	796533.
TOTAL ANNUAL O&M COST	557087.	823.	19164.	4944313.	56347.
TOTAL ANNUAL COST	1581498.	3056.	64745.	16704082.	155008.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4944313.	4629770.	7129844.	16703927.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	557087.	557087.	557087.	557087.	0.	1.
100000. TO 500000.	456555.	100338.	242159.	1695112.	144827.	7.
50000. TO 100000.	93173.	54919.	70793.	353964.	18329.	5.
10000. TO 50000.	43387.	10142.	18226.	1458106.	8293.	80.
0. TO 10000.	9870.	823.	5334.	880102.	2384.	165.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	10678576.	8351568.	9515072.	19030144.	1645450.	2.
1000000. TO 5000000.	4884566.	1027821.	2166259.	32493888.	1354420.	15.
500000. TO 1000000.	972246.	500314.	671046.	17447184.	147907.	26.
100000. TO 500000.	492514.	100749.	250754.	43862032.	109488.	175.
0. TO 100000.	99262.	21717.	72292.	2891669.	22269.	40.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	343.	314.	1223.	2046.	99.	2425.	42.	2288.	6.	0.	3356.	1597.
MIN	0.	1.	0.	0.	7.	0.	0.	9.	0.	0.	0.	0.
AVE	116.	16.	94.	49.	26.	193.	34.	138.	2.	0.	3356.	1597.
TOT	809.	1830.	9464.	10055.	526.	35374.	103.	29396.	86.	0.	3356.	1597.
SD	123.	37.	143.	218.	23.	260.	6.	245.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	28.	3.	250.	90.	66.	375.	2.	91.	1.	0.	262.	47.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	13.	1.	7.	3.	12.	12.	2.	3.	0.	0.	262.	47.
TOT	88.	64.	738.	522.	239.	2225.	5.	740.	13.	0.	262.	47.
SD	12.	0.	25.	9.	18.	34.	1.	8.	0.	0.	0.	0.

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SOUTH CAROLINA
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 258

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	6050.	7.	621.	160235.	684.
FLOW (MGY)	18590.	4.	358.	92393.	1816.
TOTAL CAPITAL COST	6975899.	9253.	295388.	76210068.	616207.
TOTAL ANNUAL O&M COST	436535.	700.	14524.	3747166.	40283.
TOTAL ANNUAL COST	1257191.	1989.	52039.	13425984.	117563.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
3747166.	3810502.	5868172.	13425840.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	436535.	155898.	297923.	1191693.	128741.	4.
50000. TO 100000.	82610.	65660.	77203.	463218.	6418.	6.
10000. TO 50000.	49752.	10305.	17382.	1199349.	8028.	69.
0. TO 10000.	9739.	700.	4989.	892956.	2430.	179.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	8719373.	6820783.	7770078.	15540156.	1342501.	2.
1000000. TO 5000000.	4015830.	1198419.	2065673.	16525387.	898063.	8.
500000. TO 1000000.	937727.	509263.	726792.	15989427.	127608.	22.
100000. TO 500000.	497712.	100979.	259176.	43023136.	107021.	166.
0. TO 100000.	97614.	11566.	69755.	4185270.	20822.	60.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	123.	166.	609.	1543.	66.	2069.	38.	1903.	4.	0.	2791.	1200.
MIN	0.	1.	0.	0.	5.	0.	0.	4.	0.	0.	0.	0.
AVE	51.	11.	70.	34.	20.	171.	31.	116.	2.	0.	2791.	1200.
TOT	359.	1242.	7118.	6973.	395.	31288.	93.	24681.	69.	0.	2791.	1200.
SD	50.	19.	77.	158.	14.	217.	6.	195.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	16.	2.	93.	70.	32.	297.	2.	70.	1.	0.	219.	36.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	7.	0.	8.	2.	7.	10.	1.	3.	0.	0.	219.	36.
TOT	47.	55.	439.	376.	131.	1823.	4.	607.	10.	0.	219.	36.
SD	6.	0.	10.	6.	9.	26.	0.	6.	0.	0.	0.	0.

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SOUTH DAKOTA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 22

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2500.	22.	324.	7120.	712.
FLOW (MGY)	2251.	10.	278.	6123.	646.
TOTAL CAPITAL COST	891244.	27341.	166333.	3659318.	243858.
TOTAL ANNUAL O&M COST	89177.	1509.	13494.	296877.	25109.
TOTAL ANNUAL COST	202365.	5135.	34619.	761611.	56043.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
256877.	182966.	281767.	761610.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	89177.	89177.	89177.	178354.	0.	2.
10000. TO 50000.	24585.	11291.	16647.	49940.	7013.	3.
0. TO 10000.	9869.	1509.	4034.	68584.	2900.	17.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1114054.	1114054.	1114054.	2228108.	1024.	2.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	395865.	111411.	189200.	1702797.	84495.	9.
0. TO 100000.	93792.	34177.	58477.	643251.	17788.	11.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	98.	124.	21.	69.	57.	0.	692.	32.	0.	0.	0.
MIN	0.	2.	0.	0.	17.	0.	0.	14.	0.	0.	0.	0.
AVE	0.	32.	37.	8.	33.	57.	0.	122.	11.	0.	0.	0.
TOT	0.	284.	484.	25.	265.	57.	0.	2446.	58.	0.	0.	0.
SD	0.	38.	28.	11.	23.	0.	0.	203.	12.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	2.	11.	3.	54.	3.	0.	22.	11.	0.	0.	0.
MIN	0.	0.	0.	0.	4.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	2.	1.	18.	3.	0.	4.	3.	0.	0.	0.
TOT	0.	9.	20.	3.	147.	3.	0.	77.	29.	0.	0.	0.
SD	0.	1.	3.	1.	22.	0.	0.	6.	4.	0.	0.	0.

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SOUTH DAKOTA
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 22

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2500.	22.	324.	7120.	712.
FLOW (MGY)	1442.	10.	182.	4007.	413.
TOTAL CAPITAL COST	670252.	26930.	129205.	2842499.	102288.
TOTAL ANNUAL O&M COST	62016.	1189.	9816.	215951.	17411.
TOTAL ANNUAL COST	147138.	4609.	26225.	576949.	40536.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
215951.	142125.	218872.	576948.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	62016.	62016.	62016.	124031.	64.	2.
10000. TO 50000.	17426.	14064.	15745.	31491.	2377.	2.
0. TO 10000.	8146.	1189.	3357.	60429.	2297.	18.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	837815.	837815.	837815.	1675629.	0.	2.
100000. TO 500000.	301696.	101853.	156502.	1252017.	63815.	8.
0. TO 100000.	88982.	33663.	52124.	625488.	17213.	12.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	70.	124.	21.	57.	46.	0.	520.	24.	0.	0.	0.
MIN	0.	2.	0.	0.	14.	0.	0.	11.	0.	0.	0.	0.
AVE	0.	23.	33.	8.	27.	46.	0.	93.	8.	0.	0.	0.
TOT	0.	204.	426.	25.	217.	46.	0.	1853.	73.	0.	0.	0.
SD	0.	28.	29.	11.	19.	0.	0.	152.	9.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	2.	11.	3.	37.	2.	0.	16.	7.	0.	0.	0.
MIN	0.	0.	0.	0.	3.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	2.	1.	13.	2.	0.	3.	2.	0.	0.	0.
TOT	0.	8.	25.	3.	102.	2.	0.	57.	19.	0.	0.	0.
SD	0.	1.	3.	1.	15.	0.	0.	4.	3.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

SOUTH DAKOTA
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 22

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2500.	22.	324.	7120.	712.
FLOW (MGY)	1051.	8.	134.	2941.	301.
TOTAL CAPITAL COST	548065.	23190.	107090.	2355985.	148449.
TOTAL ANNUAL O&M COST	48084.	1025.	7752.	170550.	13450.
TOTAL ANNUAL COST	117688.	3970.	21353.	469761.	32286.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
170550.	117799.	181411.	469759.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	48084.	10769.	30163.	120651.	20728.	4.
0. TO 10000.	6503.	1025.	2772.	49899.	1796.	18.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	685081.	685081.	685081.	1370161.	810.	2.
100000. TO 500000.	247290.	101321.	141682.	850092.	54460.	6.
0. TO 100000.	93812.	28987.	51767.	724738.	21222.	14.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	56.	103.	15.	49.	40.	0.	420.	19.	0.	0.	0.
MIN	0.	2.	0.	0.	12.	0.	0.	9.	0.	0.	0.	0.
AVE	0.	18.	28.	6.	24.	40.	0.	76.	7.	0.	0.	0.
TOT	0.	161.	367.	19.	188.	40.	0.	1521.	59.	0.	0.	0.
SD	0.	22.	24.	8.	16.	0.	0.	124.	7.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	2.	9.	2.	29.	2.	0.	12.	6.	0.	0.	0.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	2.	1.	10.	2.	0.	47.	14.	0.	0.	0.
TOT	0.	7.	20.	3.	78.	2.	0.	47.	2.	0.	0.	0.
SD	0.	0.	2.	1.	12.	0.	0.	3.	2.	0.	0.	0.

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TENNESSEE
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 328

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	14000.	15.	579.	189915.	1166.
FLOW (MGY)	44821.	7.	715.	234656.	3492.
TOTAL CAPITAL COST	22045040.	12524.	408055.	133842080.	1584121.
TOTAL ANNUAL OEM COST	1422552.	860.	30156.	9891157.	118488.
TOTAL ANNUAL COST	4222271.	2957.	81976.	26888128.	313014.

ANNUAL COST OF WASTE TREATMENT

OEM	REPLACEMENT	INTEREST	TOTAL
9891157.	6692103.	10305835.	26889088.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1422552.	899139.	1153591.	3460773.	262008.	3.
100000. TO 500000.	362861.	108856.	198318.	2776450.	79820.	14.
50000. TO 100000.	95850.	54529.	70876.	1134010.	13452.	16.
10000. TO 50000.	45175.	10050.	18938.	1552902.	9963.	82.
0. TO 10000.	9967.	860.	4540.	967083.	2458.	213.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	27556288.	5363490.	14466220.	57864880.	10666827.	4.
1000000. TO 5000000.	4956188.	1063470.	2335770.	56058496.	1333394.	24.
500000. TO 1000000.	962863.	530552.	689972.	11039552.	131448.	16.
100000. TO 500000.	496058.	100393.	205528.	35145248.	98800.	171.
0. TO 100000.	99334.	15655.	63675.	7195273.	22881.	113.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	10526.	899.	2841.	4433.	266.	2065.	53.	3981.	17.	1947.	5544.	1777.
MIN	0.	1.	0.	0.	6.	0.	0.	6.	1.	0.	0.	0.
AVE	663.	23.	130.	97.	27.	192.	40.	149.	3.	1947.	5544.	1777.
TOT	11268.	4693.	26680.	22110.	1095.	27631.	240.	30631.	223.	1947.	5544.	1777.
SD	2543.	75.	283.	427.	42.	333.	8.	403.	3.	0.	0.	0.

DISTRIBUTION OF ANNUAL OEM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	186.	11.	982.	150.	503.	248.	5.	184.	4.	4.	475.	58.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	17.	1.	17.	5.	23.	16.	3.	5.	1.	4.	475.	58.
TOT	295.	153.	3454.	1251.	934.	2242.	16.	963.	45.	4.	475.	58.
SD	44.	1.	75.	17.	79.	40.	1.	16.	1.	0.	0.	0.

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TENNESSEE
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 328

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	14000.	15.	579.	189915.	1166.
FLOW (MGY)	46821.	7.	597.	195922.	3234.
TOTAL CAPITAL COST	22045040.	12524.	360922.	118382320.	1456012.
TOTAL ANNUAL O&M COST	1422552.	860.	26050.	8544376.	110920.
TOTAL ANNUAL COST	4222271.	2957.	71884.	23577984.	289215.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
8544376.	5919115.	9115434.	23578912.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1422552.	652433.	1071355.	3214067.	389500.	3.
100000. TO 500000.	308302.	118726.	206959.	1655670.	60790.	8.
50000. TO 100000.	95850.	50934.	68880.	1239836.	15049.	18.
10000. TO 50000.	45175.	10041.	18983.	1442696.	10415.	76.
0. TO 10000.	9967.	860.	4449.	992171.	2399.	223.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	27556288.	6180316.	15803418.	47410256.	10845973.	3.
1000000. TO 5000000.	4956188.	1066293.	2209553.	50819728.	1322792.	23.
500000. TO 1000000.	962863.	546218.	719126.	7910390.	119128.	11.
100000. TO 500000.	496098.	100393.	202163.	33963312.	91842.	168.
0. TO 100000.	98927.	15655.	64026.	7875182.	22177.	123.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	10526.	899.	2841.	3933.	266.	1622.	39.	3981.	11.	1947.	4188.	1469.
MIN	0.	1.	0.	0.	6.	0.	0.	6.	0.	0.	0.	0.
AVE	651.	20.	119.	79.	24.	170.	35.	132.	2.	1947.	4188.	1469.
TOT	11060.	4240.	24438.	18131.	978.	24539.	207.	26993.	191.	1947.	4188.	1469.
SD	2545.	73.	274.	358.	41.	287.	5.	364.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	186.	11.	982.	150.	503.	212.	3.	184.	3.	4.	362.	49.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	16.	1.	15.	5.	19.	13.	2.	4.	0.	4.	362.	49.
TOT	279.	145.	3099.	1055.	796.	1867.	11.	843.	35.	4.	362.	49.
SD	44.	1.	74.	16.	78.	33.	1.	14.	0.	0.	0.	0.

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TENNESSEE
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 328

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	14000.	15.	579.	189915.	1166.
FLOW (MGY)	30784.	6.	427.	139904.	2176.
TOTAL CAPITAL COST	13601761.	9873.	285624.	93684768.	987595.
TOTAL ANNUAL O&M COST	988628.	860.	19848.	6510142.	78789.
TOTAL ANNUAL COST	2716051.	2287.	56121.	18407664.	200077.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
6510142.	4684238.	7213723.	18408096.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	988628.	529572.	766276.	2298827.	229865.	3.
100000. TO 500000.	242263.	109526.	165964.	1161745.	47137.	7.
50000. TO 100000.	88786.	54184.	67052.	603468.	12173.	9.
10000. TO 50000.	47920.	10103.	20741.	1431157.	11428.	69.
0. TO 10000.	9889.	860.	4229.	1015015.	2396.	240.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	17002192.	11136555.	14069368.	28138736.	4147677.	2.
1000000. TO 5000000.	4474366.	1008469.	2091678.	41833568.	1158665.	20.
500000. TO 1000000.	917828.	532793.	723237.	8678839.	144683.	12.
100000. TO 500000.	494184.	100218.	196914.	29340176.	88005.	149.
0. TO 100000.	99617.	12341.	62868.	9115869.	22184.	145.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	5218.	657.	2169.	2601.	220.	1384.	36.	3040.	8.	1610.	3483.	1104.
MIN	0.	1.	0.	0.	5.	0.	0.	5.	0.	0.	0.	0.
AVE	330.	16.	97.	57.	21.	149.	31.	111.	2.	1610.	3483.	1104.
TOT	5616.	3322.	20062.	13056.	845.	21498.	187.	22742.	159.	1610.	3483.	1104.
SD	1260.	54.	211.	248.	33.	240.	4.	287.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	132.	8.	672.	103.	356.	167.	2.	123.	2.	3.	302.	37.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	12.	1.	11.	3.	14.	10.	1.	3.	0.	3.	302.	37.
TOT	207.	128.	2250.	788.	574.	1507.	9.	679.	27.	3.	302.	37.
SD	31.	1.	51.	11.	55.	26.	0.	10.	0.	0.	0.	0.

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TEXAS
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 630

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	12600.	15.	418.	263350.	914.
FLOW (MGY)	469587.	1.	3150.	1984452.	21181.
TOTAL CAPITAL COST	1007273984.	6629.	3258196.	2052663552.	40681616.
TOTAL ANNUAL O&M COST	13023192.	433.	135659.	85465008.	631258.
TOTAL ANNUAL COST	140946944.	1279.	549407.	346126592.	5739139.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
85465008.	102633168.	158055008.	346152960.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	13023192.	501852.	1601355.	592514.	2117304.	37.
100000. TO 500000.	481356.	103901.	264947.	18281344.	109001.	69.
50000. TO 100000.	97399.	50758.	72530.	2973745.	13420.	41.
10000. TO 50000.	46549.	10046.	22170.	3325477.	11217.	150.
0. TO 10000.	9958.	433.	4915.	1636625.	2545.	333.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	1259092480.	5066823.	45101328.	2300168448.	175083120.	51.
1000000. TO 5000000.	4676370.	1001198.	2478572.	163585776.	1227268.	66.
500000. TO 1000000.	997248.	503993.	661607.	33080368.	119750.	50.
100000. TO 500000.	496428.	100174.	203129.	57688640.	93603.	284.
0. TO 100000.	99679.	8281.	63428.	11353613.	21552.	179.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	933376.	5127.	11186.	38936.	765.	3344.	74.	17886.	30.	10770.	0.	24581.
MIN	0.	0.	0.	0.	3.	0.	0.	9.	0.	0.	0.	0.
AVE	12414.	99.	383.	386.	73.	224.	62.	399.	3.	10770.	0.	4044.
TOT	1313976.	38891.	150327.	165789.	7846.	47336.	311.	142668.	383.	10770.	0.	173910.
SD	91329.	339.	870.	2138.	117.	469.	9.	1338.	3.	0.	0.	4913.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1458.	76.	3666.	1350.	3944.	526.	16.	2459.	11.	15.	0.	911.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	96.	2.	75.	20.	152.	23.	10.	23.	1.	15.	0.	155.
TOT	10061.	820.	29450.	8637.	15315.	5006.	49.	8330.	90.	15.	0.	6682.
SD	178.	5.	243.	80.	448.	69.	4.	142.	1.	0.	0.	183.

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TEXAS
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 630

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	12600.	15.	418.	263350.	914.
FLOW (MGY)	75127.	1.	720.	453701.	3534.
TOTAL CAPITAL COST	41570496.	4296.	636740.	401146112.	2461406.
TOTAL ANNUAL O&M COST	2527266.	324.	45185.	28466864.	148697.
TOTAL ANNUAL COST	7806717.	869.	126057.	79415808.	456280.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
28466864.	20057296.	30888224.	79412384.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2527266.	599806.	994198.	8947779.	600521.	9.
100000. TO 500000.	490134.	101186.	210793.	12436806.	98641.	59.
50000. TO 100000.	95969.	50817.	71093.	1564055.	15274.	22.
10000. TO 50000.	49756.	10089.	21660.	3812174.	10262.	176.
0. TO 10000.	9955.	324.	4692.	1708018.	2449.	364.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	51963120.	5368195.	12689106.	253782128.	11830863.	20.
1000000. TO 5000000.	4930840.	1002662.	2463578.	145351136.	1164315.	59.
500000. TO 1000000.	987780.	512196.	707867.	29730432.	142781.	42.
100000. TO 500000.	496428.	100438.	200138.	58840512.	92357.	294.
0. TO 100000.	99979.	5370.	64029.	13766324.	21845.	215.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	24662.	1305.	3376.	6390.	335.	1469.	45.	5502.	15.	4176.	0.	14905.
MIN	0.	0.	0.	0.	3.	0.	0.	9.	0.	0.	0.	0.
AVE	752.	32.	174.	82.	37.	138.	38.	163.	2.	4176.	0.	2534.
TOT	78968.	13097.	68139.	35322.	3973.	29598.	190.	58408.	330.	4176.	0.	108972.
SD	2739.	89.	286.	358.	49.	210.	6.	415.	2.	0.	0.	2993.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	322.	18.	702.	267.	872.	245.	8.	386.	5.	8.	0.	560.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	37.	1.	23.	6.	36.	11.	3.	6.	0.	8.	0.	99.
TOT	3912.	425.	9022.	2465.	3849.	2327.	13.	2136.	70.	8.	0.	4243.
SD	56.	1.	59.	17.	98.	28.	1.	21.	1.	0.	0.	113.

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TEXAS
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 630

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	12600.	15.	418.	263350.	918.
FLOW (MGY)	30788.	0.	407.	256586.	1599.
TOTAL CAPITAL COST	19248848.	3477.	426502.	268696320.	1358296.
TOTAL ANNUAL O&M COST	1161824.	290.	29862.	18813088.	87082.
TOTAL ANNUAL COST	3321971.	732.	84026.	52936512.	255667.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
18813088.	13434815.	20689600.	52937488.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1161824.	615918.	828035.	3312139.	250390.	4.
100000. TO 500000.	491766.	102196.	197155.	8674816.	101908.	44.
50000. TO 100000.	96886.	50817.	76348.	1985035.	14951.	26.
10000. TO 50000.	49866.	10123.	20557.	3104163.	9599.	151.
0. TO 10000.	9803.	290.	4291.	1737874.	2309.	405.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	24061056.	5028106.	9567992.	124383904.	6114805.	13.
1000000. TO 5000000.	4809508.	1014338.	2322972.	116148640.	1015959.	50.
500000. TO 1000000.	968443.	500238.	680035.	27201392.	128821.	40.
100000. TO 500000.	499571.	100130.	202016.	51110080.	100355.	253.
0. TO 100000.	99937.	4346.	62156.	17030688.	22408.	274.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	6356.	670.	1902.	2652.	224.	1253.	41.	3100.	13.	3351.	0.	11203.
MIN	0.	0.	0.	0.	3.	0.	0.	9.	0.	0.	0.	0.
AVE	322.	21.	127.	45.	27.	119.	34.	114.	2.	3351.	0.	1957.
TOT	33794.	8599.	49667.	19467.	2902.	25498.	171.	40844.	271.	3351.	0.	84131.
SD	900.	50.	189.	159.	32.	175.	5.	245.	2.	0.	0.	2281.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	220.	10.	376.	120.	418.	194.	3.	145.	4.	6.	0.	424.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	25.	1.	15.	4.	19.	9.	2.	4.	0.	6.	0.	77.
TOT	2617.	339.	5739.	1537.	1996.	1852.	11.	1363.	53.	6.	0.	3300.
SD	38.	1.	35.	9.	47.	22.	1.	10.	0.	0.	0.	87.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

UTAH
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 57

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2010.	3.	264.	15026.	461.
FLOW (MGY)	7296.	5.	568.	32348.	1430.
TOTAL CAPITAL COST	4124562.	24783.	412445.	23509344.	686511.
TOTAL ANNUAL O&M COST	674226.	1196.	47491.	2706994.	111025.
TOTAL ANNUAL COST	1198045.	4449.	99872.	5692685.	165537.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2706994.	1175467.	1810218.	5692679.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	674226.	674226.	674226.	674226.	0.	1.
100000. TO 500000.	393240.	232890.	316786.	950359.	80434.	3.
50000. TO 100000.	83841.	53029.	72037.	432220.	11927.	6.
10000. TO 50000.	47869.	13102.	30874.	493981.	12048.	16.
0. TO 10000.	9965.	1196.	5039.	156217.	2631.	31.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	5155702.	5155702.	5155702.	5155702.	0.	1.
1000000. TO 5000000.	2734000.	1055777.	1566446.	15664464.	545898.	10.
500000. TO 1000000.	649338.	533600.	572353.	1717059.	66676.	3.
100000. TO 500000.	482780.	100792.	214163.	5996564.	97533.	28.
0. TO 100000.	99648.	30978.	56866.	852986.	22318.	15.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1379.	303.	1348.	697.	46.	651.	35.	406.	6.	0.	0.	1035.
MIN	0.	2.	0.	0.	13.	0.	0.	8.	0.	0.	0.	0.
AVE	408.	41.	211.	96.	22.	216.	35.	99.	2.	0.	0.	936.
TOT	1632.	1542.	7177.	3266.	155.	4329.	35.	3480.	22.	0.	0.	1871.
SD	647.	65.	307.	165.	13.	196.	0.	106.	2.	0.	0.	141.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	158.	9.	411.	77.	46.	64.	2.	20.	1.	0.	0.	45.
MIN	0.	0.	0.	0.	3.	0.	0.	1.	0.	0.	0.	0.
AVE	54.	1.	43.	10.	13.	17.	2.	4.	0.	0.	0.	41.
TOT	215.	57.	1450.	345.	89.	339.	2.	124.	4.	0.	0.	81.
SD	69.	2.	89.	18.	16.	20.	0.	4.	0.	0.	0.	6.

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UTAH

FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 57

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2010.	3.	264.	15026.	461.
FLOW (MGY)	4905.	5.	395.	22516.	923.
TOTAL CAPITAL COST	2837220.	24783.	333359.	19001472.	507180.
TOTAL ANNUAL O&M COST	476877.	1196.	35561.	2026965.	77701.
TOTAL ANNUAL COST	837204.	4445.	77897.	4440151.	139253.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2026965.	950074.	1463112.	4440150.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	476877.	202057.	284711.	1138843.	128807.	4.
50000. TO 100000.	81371.	57165.	67957.	339784.	8714.	5.
10000. TO 50000.	40601.	11555.	25161.	402577.	10919.	16.
0. TO 10000.	9429.	1196.	4555.	145766.	2435.	32.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3546525.	1359630.	1839597.	12877183.	762570.	7.
500000. TO 1000000.	965441.	565460.	845896.	4229481.	159348.	5.
100000. TO 500000.	482780.	101998.	216436.	5410909.	109839.	25.
0. TO 100000.	99648.	30978.	61717.	1234348.	24289.	20.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	785.	226.	1048.	471.	39.	568.	35.	312.	8.	0.	0.	1035.
MIN	0.	2.	0.	0.	11.	0.	0.	8.	0.	0.	0.	0.
AVE	253.	33.	170.	68.	20.	185.	35.	83.	2.	0.	0.	936.
TOT	1012.	1237.	5775.	2318.	137.	3710.	35.	2888.	19.	0.	0.	1871.
SD	355.	51.	240.	112.	11.	163.	0.	84.	1.	0.	0.	141.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	114.	7.	288.	54.	33.	48.	2.	14.	1.	0.	0.	45.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	41.	1.	31.	7.	10.	13.	2.	3.	0.	0.	0.	41.
TOT	165.	49.	1043.	250.	71.	260.	2.	102.	3.	0.	0.	81.
SD	48.	1.	62.	13.	12.	14.	0.	3.	0.	0.	0.	6.

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UTAH

FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 57

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2010.	3.	264.	15026.	461.
FLOW (MGY)	3416.	4.	265.	15102.	647.
TOTAL CAPITAL COST	2061881.	22153.	263960.	15045713.	405703.
TOTAL ANNUAL O&M COST	348207.	1035.	25949.	1479085.	58222.
TOTAL ANNUAL COST	610066.	3849.	59472.	3389887.	106973.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1479085.	752286.	1158519.	3389889.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	348207.	157527.	244904.	734711.	96333.	3.
50000. TO 100000.	87885.	50685.	71356.	285425.	16686.	4.
10000. TO 50000.	33987.	10449.	21821.	305499.	8826.	14.
0. TO 10000.	8410.	1035.	4263.	153456.	2262.	36.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2577351.	1106108.	1612446.	9674677.	519309.	6.
500000. TO 1000000.	757522.	705804.	726180.	3630898.	27922.	5.
100000. TO 500000.	413591.	101985.	188790.	3964591.	90110.	21.
0. TO 100000.	97494.	27691.	61479.	1536983.	24166.	25.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	482.	188.	834.	372.	28.	461.	32.	243.	3.	0.	0.	1035.
MIN	0.	1.	0.	0.	10.	0.	0.	6.	0.	0.	0.	0.
AVE	170.	25.	131.	48.	16.	153.	32.	64.	2.	0.	0.	936.
TOT	679.	964.	4456.	1634.	109.	3060.	32.	2224.	16.	0.	0.	1871.
SD	211.	43.	195.	88.	7.	133.	0.	60.	1.	0.	0.	141.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	88.	6.	208.	43.	18.	35.	2.	11.	1.	0.	0.	45.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	31.	1.	21.	5.	6.	10.	2.	2.	0.	0.	0.	41.
TOT	126.	42.	729.	180.	43.	196.	2.	79.	3.	0.	0.	81.
SD	36.	1.	48.	10.	6.	10.	0.	2.	0.	0.	0.	6.

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VERMONT
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 37

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3000.	25.	383.	14171.	539.
FLOW (MGY)	2945.	7.	310.	11459.	629.
TOTAL CAPITAL COST	1380935.	22134.	256719.	9498588.	361598.
TOTAL ANNUAL O&M COST	183807.	1006.	19041.	704500.	33739.
TOTAL ANNUAL COST	346006.	3957.	51644.	1910813.	77031.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
704500.	474929.	731391.	1910818.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	183807.	183807.	183807.	183807.	0.	1.
50000. TO 100000.	79540.	51644.	66030.	198089.	13969.	3.
10000. TO 50000.	36361.	10158.	21350.	256199.	11004.	12.
0. TO 10000.	8957.	1006.	3162.	66405.	2523.	21.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1726168.	1181212.	1487302.	5949211.	234107.	4.
500000. TO 1000000.	765435.	521362.	643398.	1286796.	172590.	2.
100000. TO 500000.	489565.	111485.	256790.	3851854.	137254.	15.
0. TO 100000.	81907.	27668.	49087.	785385.	14493.	16.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	25.	62.	852.	425.	8.	681.	0.	513.	7.	0.	0.	232.
MIN	0.	1.	0.	0.	8.	0.	0.	11.	0.	0.	0.	0.
AVE	20.	10.	116.	44.	8.	235.	0.	145.	1.	0.	0.	232.
TOT	59.	188.	3489.	1413.	8.	2352.	0.	1744.	14.	0.	0.	232.
SD	5.	16.	164.	83.	0.	250.	0.	183.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	8.	1.	148.	36.	1.	56.	0.	13.	2.	0.	0.	8.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	4.	1.	12.	4.	1.	17.	0.	4.	0.	0.	0.	8.
TOT	11.	10.	343.	114.	1.	166.	0.	44.	3.	0.	0.	8.
SD	2.	0.	27.	7.	0.	21.	0.	4.	1.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

VERMONT
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 37

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3000.	25.	383.	14171.	539.
FLOW (MGY)	2945.	7.	293.	10823.	629.
TOTAL CAPITAL COST	1380935.	22134.	243906.	9024518.	360652.
TOTAL ANNUAL O&M COST	183807.	1006.	17773.	657589.	33615.
TOTAL ANNUAL COST	346006.	3957.	48749.	1803695.	76817.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
657589.	451226.	694888.	1803701.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	183807.	183807.	183807.	183807.	0.	1.
50000. TO 100000.	79540.	51644.	66030.	198089.	13969.	3.
10000. TO 50000.	39203.	11079.	20538.	184844.	9775.	9.
0. TO 10000.	9906.	1006.	3785.	90849.	3002.	24.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1726168.	1181212.	1487302.	5949211.	234107.	4.
500000. TO 1000000.	765435.	765435.	765435.	765435.	0.	1.
100000. TO 500000.	457982.	111485.	246187.	3692806.	119106.	15.
0. TO 100000.	87820.	27668.	51365.	873205.	16887.	17.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	19.	62.	852.	425.	8.	681.	0.	513.	6.	0.	0.	232.
MIN	0.	1.	0.	0.	8.	0.	0.	11.	0.	0.	0.	0.
AVE	14.	9.	108.	42.	8.	227.	0.	143.	1.	0.	0.	232.
TOT	43.	156.	3252.	1334.	8.	2273.	0.	1714.	12.	0.	0.	232.
SD	5.	15.	162.	83.	0.	254.	0.	184.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	3.	1.	148.	36.	1.	56.	0.	13.	1.	0.	0.	8.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	2.	0.	11.	3.	1.	16.	0.	4.	0.	0.	0.	8.
TOT	7.	9.	320.	107.	1.	160.	0.	43.	2.	0.	0.	8.
SD	1.	0.	27.	7.	0.	21.	0.	4.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

VERMONT
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 37

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3000.	25.	383.	14171.	539.
FLOW (MGY)	2417.	7.	245.	9049.	536.
TOTAL CAPITAL COST	1380935.	22134.	219076.	8105826.	327186.
TOTAL ANNUAL O&M COST	154033.	973.	15163.	561015.	28625.
TOTAL ANNUAL COST	294041.	3957.	42985.	1590448.	67896.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
561015.	405291.	624148.	1590454.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	154033.	154033.	154033.	154033.	0.	1.
50000. TO 100000.	79540.	52917.	66229.	132457.	18826.	2.
10000. TO 50000.	40898.	10297.	20657.	185916.	10192.	9.
0. TO 10000.	9942.	973.	3544.	88609.	2632.	25.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1726168.	1203813.	1436003.	4308011.	265959.	3.
500000. TO 1000000.	985337.	765435.	875386.	1750771.	155500.	2.
100000. TO 500000.	393012.	112327.	223914.	3134800.	109370.	14.
0. TO 100000.	96947.	27668.	52151.	938714.	17756.	18.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	19.	62.	753.	350.	8.	681.	0.	513.	5.	0.	0.	232.
MIN	0.	1.	0.	0.	8.	0.	0.	11.	0.	0.	0.	0.
AVE	13.	8.	96.	35.	8.	209.	0.	131.	1.	0.	0.	232.
TOT	39.	144.	2881.	1119.	8.	2094.	0.	1577.	11.	0.	0.	232.
SD	6.	15.	143.	70.	0.	235.	0.	169.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	3.	1.	124.	30.	1.	56.	0.	13.	1.	0.	0.	8.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	2.	0.	9.	3.	1.	14.	0.	3.	0.	0.	0.	8.
TOT	6.	9.	265.	90.	1.	142.	0.	39.	2.	0.	0.	8.
SD	1.	0.	23.	6.	0.	19.	0.	4.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

VIRGINIA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 266

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	7000.	8.	540.	143731.	940.
FLOW (MGY)	64657.	3.	907.	241258.	5314.
TOTAL CAPITAL COST	30760288.	17281.	534854.	142271104.	2242362.
TOTAL ANNUAL OEM COST	1843609.	679.	33559.	8926715.	145536.
TOTAL ANNUAL COST	5750164.	2874.	101483.	26994400.	427887.

ANNUAL COST OF WASTE TREATMENT

OEM	REPLACEMENT	INTEREST	TOTAL
8926715.	7113554.	10954869.	26995136.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1843609.	557865.	1063544.	4254179.	570171.	4.
100000. TO 500000.	332842.	110132.	171754.	1545789.	67750.	9.
50000. TO 100000.	89357.	51216.	68230.	1023447.	11935.	15.
10000. TO 50000.	43723.	10062.	21388.	1326085.	9748.	62.
0. TO 10000.	9932.	676.	4416.	777267.	2494.	176.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	38450352.	5117148.	14519085.	89514512.	12229799.	6.
1000000. TO 5000000.	4469382.	1095446.	2143605.	40728496.	890062.	19.
500000. TO 1000000.	912782.	537359.	689507.	10342599.	118335.	15.
100000. TO 500000.	492148.	101263.	213507.	32453008.	97091.	152.
0. TO 100000.	98578.	21601.	64878.	4800968.	21801.	74.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	505.	542.	856.	11410.	87.	3561.	43.	5519.	9.	0.	10306.	3096.
MIN	0.	1.	0.	0.	6.	0.	0.	5.	0.	0.	0.	0.
AVE	100.	23.	119.	161.	23.	226.	33.	183.	3.	0.	7591.	1792.
TOT	1197.	3496.	17015.	29349.	831.	34734.	298.	34646.	144.	0.	15182.	5377.
SD	143.	58.	144.	942.	15.	506.	4.	556.	2.	0.	3840.	1102.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	44.	6.	108.	301.	54.	735.	2.	219.	2.	0.	867.	95.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	12.	1.	10.	7.	9.	21.	1.	6.	1.	0.	634.	56.
TOT	140.	104.	1427.	1203.	321.	3164.	13.	1094.	26.	0.	1267.	168.
SD	13.	1.	17.	28.	10.	78.	0.	23.	1.	0.	330.	34.

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VIRGINIA

FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 266

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	9000.	8.	540.	143731.	940.
FLOW (MGY)	33938.	3.	664.	176494.	3186.
TOTAL CAPITAL COST	18957200.	16364.	449452.	119554256.	1578880.
TOTAL ANNUAL O&M COST	1132681.	679.	27290.	7259247.	99901.
TOTAL ANNUAL COST	3540244.	2874.	84369.	22442032.	298788.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
7259247.	5977712.	9205673.	22442624.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1132681.	557865.	766960.	3067841.	254289.	4.
100000. TO 500000.	246412.	106175.	142459.	1282129.	43620.	9.
50000. TO 100000.	89357.	51216.	67987.	883834.	12550.	13.
10000. TO 50000.	46499.	10456.	20714.	1263577.	9759.	61.
0. TO 10000.	9932.	679.	4257.	761920.	2408.	179.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	23696496.	6242367.	12545955.	62729776.	7288150.	5.
1000000. TO 5000000.	4469382.	1048256.	2134733.	40559936.	902903.	19.
500000. TO 1000000.	984544.	502255.	722330.	9390284.	136104.	13.
100000. TO 500000.	492148.	101009.	212918.	31511824.	96206.	148.
0. TO 100000.	98978.	20455.	64835.	5251634.	21559.	81.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	280.	415.	685.	6041.	87.	2492.	43.	3645.	9.	0.	6805.	2125.
MIN	0.	1.	0.	0.	5.	0.	0.	5.	0.	0.	0.	0.
AVE	73.	21.	110.	116.	23.	204.	33.	162.	3.	0.	5840.	1246.
TOT	881.	3228.	15744.	21038.	821.	31437.	298.	30554.	133.	0.	11681.	3739.
SD	89.	51.	133.	560.	15.	410.	4.	422.	2.	0.	1364.	766.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	30.	5.	97.	168.	54.	432.	2.	118.	2.	0.	578.	66.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	10.	1.	9.	5.	9.	16.	1.	5.	1.	0.	489.	39.
TOT	114.	99.	1271.	926.	317.	2530.	13.	870.	23.	0.	979.	118.
SD	9.	1.	16.	18.	10.	54.	0.	14.	0.	0.	126.	24.

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VIRGINIA
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 266

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	9000.	8.	540.	143731.	940.
FLOW (MGY)	25486.	3.	540.	143517.	2463.
TOTAL CAPITAL COST	15351413.	14127.	395657.	105244704.	1313813.
TOTAL ANNUAL O&M COST	915302.	679.	23332.	6206336.	82046.
TOTAL ANNUAL COST	2864931.	2512.	73579.	19571888.	247584.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
6206336.	5262234.	8103838.	19572400.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	915302.	503414.	683819.	2051458.	210643.	3.
100000. TO 500000.	468983.	110132.	198464.	1190781.	133825.	6.
50000. TO 100000.	96793.	50334.	70109.	1051633.	16763.	15.
10000. TO 50000.	49722.	10012.	20436.	1164832.	10178.	57.
0. TO 10000.	9932.	679.	4042.	747684.	2338.	185.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	19189264.	6948902.	11777448.	47109792.	5917422.	4.
1000000. TO 5000000.	4469382.	1100992.	2223423.	40021616.	978265.	18.
500000. TO 1000000.	912782.	554954.	725850.	8710203.	122402.	12.
100000. TO 500000.	497712.	101823.	211486.	30030992.	100668.	142.
0. TO 100000.	98525.	17658.	63157.	5684174.	21761.	90.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	224.	288.	628.	4555.	87.	2126.	41.	3032.	9.	0.	5660.	1597.
MIN	0.	1.	0.	0.	4.	0.	0.	5.	0.	0.	0.	0.
AVE	60.	19.	99.	93.	22.	187.	32.	146.	3.	0.	4968.	937.
TOT	716.	2944.	14200.	16953.	787.	28817.	285.	27674.	124.	0.	9935.	2811.
SD	71.	44.	120.	433.	15.	360.	4.	361.	2.	0.	978.	576.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	22.	3.	97.	130.	54.	342.	2.	90.	2.	0.	483.	50.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	8.	1.	8.	4.	8.	14.	1.	4.	0.	0.	418.	30.
TOT	96.	94.	1085.	767.	295.	2157.	12.	756.	21.	0.	835.	90.
SD	8.	1.	13.	14.	10.	44.	0.	11.	0.	0.	92.	18.

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WASHINGTON
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 190

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	31000.	18.	674.	127980.	2483.
FLOW (MGY)	105627.	6.	3048.	579112.	13015.
TOTAL CAPITAL COST	52907440.	22206.	1785617.	339267328.	5930570.
TOTAL ANNUAL O&M COST	3956620.	1444.	139195.	26447056.	478067.
TOTAL ANNUAL COST	10675863.	4264.	365972.	69534688.	1218982.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
26447056.	16963360.	26123568.	69533984.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3956620.	538955.	1757822.	17578224.	1269770.	10.
100000. TO 500000.	452282.	101703.	204056.	5101401.	106967.	25.
50000. TO 100000.	97556.	53112.	66379.	1062064.	12423.	16.
10000. TO 50000.	49150.	10060.	25530.	2501966.	11867.	98.
0. TO 10000.	9791.	1444.	4971.	203813.	2245.	41.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	66134288.	5136670.	21576544.	302071808.	18835584.	14.
1000000. TO 5000000.	4393176.	1052527.	2119275.	63578256.	1085315.	30.
500000. TO 1000000.	999361.	512059.	745751.	35796064.	145843.	48.
100000. TO 500000.	497758.	104123.	272397.	21246960.	121072.	78.
0. TO 100000.	98016.	27758.	69904.	1398084.	23768.	20.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	953.	269.	1763.	21838.	44.	6101.	45.	8930.	18.	11110.	16679.	2657.
MIN	0.	1.	0.	0.	6.	0.	0.	18.	0.	0.	0.	0.
AVE	214.	30.	248.	753.	26.	586.	45.	500.	5.	9051.	10215.	1417.
TOT	1926.	268?.	17605.	45806.	339.	64955.	45.	69967.	125.	36206.	51077.	8501.
SD	299.	43.	328.	2920.	12.	1021.	0.	1271.	4.	2699.	5336.	736.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	139.	8.	936.	687.	36.	1882.	3.	565.	8.	17.	1735.	108.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	32.	1.	45.	36.	12.	85.	3.	24.	1.	14.	1073.	58.
TOT	285.	114.	3228.	4085.	157.	9451.	3.	3320.	34.	58.	5363.	349.
SD	49.	1.	90.	102.	11.	241.	0.	79.	2.	3.	548.	29.

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WASHINGTON
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 190

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	31000.	18.	674.	127980.	2483.
FLOW (MGY)	45250.	4.	1339.	254397.	5573.
TOTAL CAPITAL COST	27730240.	18786.	1007904.	191501792.	3126984.
TOTAL ANNUAL O&M COST	2068368.	1200.	74477.	14150655.	245809.
TOTAL ANNUAL COST	5590107.	3585.	202479.	38470928.	638223.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
14150655.	9575089.	14745630.	38471360.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2068368.	574512.	1164196.	8149375.	615286.	7.
100000. TO 500000.	294980.	104642.	175729.	3163124.	57448.	18.
50000. TO 100000.	98924.	57535.	79349.	634795.	12889.	8.
10000. TO 50000.	49855.	10020.	20474.	1863176.	11011.	91.
0. TO 10000.	9598.	1200.	5155.	340214.	2655.	66.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	34662800.	6671221.	14627534.	146275344.	10038508.	10.
1000000. TO 5000000.	4385741.	1214890.	2237133.	46979808.	925939.	21.
500000. TO 1000000.	933277.	500127.	698069.	15357514.	142262.	22.
100000. TO 500000.	457963.	101556.	268564.	29004864.	109445.	108.
0. TO 100000.	98016.	23483.	60697.	1760203.	20128.	29.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	373.	158.	895.	9470.	41.	3816.	37.	5177.	18.	5458.	9668.	2657.
MIN	0.	1.	0.	0.	6.	0.	0.	13.	0.	0.	0.	0.
AVE	149.	23.	177.	330.	21.	368.	37.	292.	4.	4446.	5921.	1417.
TOT	1344.	2028.	12544.	37574.	278.	40807.	37.	40894.	104.	17785.	29605.	8501.
SD	140.	31.	206.	1266.	10.	639.	0.	736.	4.	1326.	3093.	736.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	72.	5.	207.	321.	31.	937.	2.	243.	8.	10.	1019.	108.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	25.	1.	26.	17.	9.	43.	2.	11.	1.	8.	630.	58.
TOT	227.	97.	1875.	1955.	111.	4724.	2.	1599.	28.	34.	3149.	349.
SD	23.	1.	44.	48.	8.	120.	0.	34.	2.	2.	322.	29.

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WASHINGTON
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 190

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	31000.	18.	674.	127980.	2483.
FLOW (MGY)	33981.	3.	1018.	193485.	4185.
TOTAL CAPITAL COST	22402384.	16220.	841494.	159883776.	2536706.
TOTAL ANNUAL O&M COST	1668232.	1026.	60161.	11430643.	197326.
TOTAL ANNUAL COST	4513334.	3086.	167029.	31735480.	516074.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
11430643.	7994188.	12311044.	31735856.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1668232.	560223.	1011620.	6069722.	492617.	6.
100000. TO 500000.	468091.	104978.	175430.	2806887.	86751.	16.
50000. TO 100000.	89950.	54429.	72085.	720854.	12496.	10.
10000. TO 50000.	42377.	10020.	19287.	1369343.	8542.	71.
0. TO 10000.	9821.	1026.	5332.	463870.	2743.	87.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	28002976.	5409001.	11873643.	118736432.	8093721.	10.
1000000. TO 5000000.	4385741.	1041746.	2003867.	40077344.	860309.	20.
500000. TO 1000000.	933277.	530933.	682732.	12289182.	127343.	18.
100000. TO 500000.	482804.	100429.	256171.	26385616.	106878.	103.
0. TO 100000.	98961.	20275.	60682.	2366597.	21708.	39.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	371.	134.	785.	7141.	41.	3256.	33.	4307.	9.	4380.	8040.	2657.
MIN	0.	1.	0.	0.	6.	0.	0.	11.	0.	0.	0.	0.
AVE	135.	18.	144.	250.	19.	322.	33.	249.	3.	3569.	4924.	1417.
TOT	1211.	1598.	10189.	28488.	246.	35791.	33.	34857.	73.	14275.	24622.	8501.
SD	119.	25.	175.	954.	9.	543.	0.	611.	2.	1064.	2572.	736.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	54.	5.	171.	248.	31.	740.	2.	185.	3.	8.	851.	108.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	23.	1.	20.	13.	7.	34.	2.	9.	1.	7.	526.	58.
TOT	208.	85.	1400.	1518.	91.	3812.	2.	1290.	16.	28.	2631.	349.
SD	19.	1.	35.	37.	8.	94.	0.	26.	1.	2.	269.	29.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WEST VIRGINIA
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 101

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	12000.	33.	654.	66101.	1291.
FLOW (MGY)	29431.	7.	717.	72393.	3033.
TOTAL CAPITAL COST	21976576.	21651.	699144.	70613552.	2448159.
TOTAL ANNUAL O&M COST	2219551.	1055.	56893.	5746163.	226897.
TOTAL ANNUAL COST	5010575.	3805.	145684.	14714131.	529392.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
5746163.	3530677.	5437240.	14714080.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2219551.	2219551.	2219551.	2219551.	0.	1.
100000. TO 500000.	420341.	109311.	222645.	1781162.	104319.	8.
50000. TO 100000.	96491.	52112.	71088.	710882.	14067.	10.
10000. TO 50000.	49265.	10170.	22500.	787506.	11291.	35.
0. TO 10000.	9739.	1055.	5257.	247092.	2703.	47.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	27470720.	13938733.	20704720.	41409440.	9568579.	2.
1000000. TO 5000000.	3440967.	1019651.	1845292.	27679392.	644551.	15.
500000. TO 1000000.	965007.	508328.	682580.	6825802.	149749.	10.
100000. TO 500000.	497428.	101610.	203173.	11174527.	105791.	55.
0. TO 100000.	96512.	27064.	62012.	1178237.	21175.	19.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	13566.	917.	3516.	2541.	84.	746.	0.	1037.	4.	9637.	0.	1127.
MIN	0.	1.	0.	0.	11.	0.	0.	9.	1.	0.	0.	0.
AVE	1121.	47.	213.	89.	36.	138.	0.	179.	2.	9637.	0.	800.
TOT	15698.	2997.	10111.	7854.	325.	5500.	0.	8049.	43.	9637.	0.	2399.
SD	3587.	121.	417.	323.	29.	168.	0.	223.	1.	0.	0.	405.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	480.	22.	1358.	261.	61.	57.	0.	58.	1.	14.	0.	44.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	58.	1.	30.	8.	19.	8.	0.	6.	0.	14.	0.	32.
TOT	612.	96.	3261.	700.	172.	338.	0.	250.	9.	14.	0.	99.
SD	125.	3.	156.	29.	23.	13.	0.	9.	0.	0.	0.	16.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WEST VIRGINIA
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 101

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	12000.	33.	654.	66101.	1291.
FLOW (MGY)	29431.	7.	709.	71566.	3035.
TOTAL CAPITAL COST	21976576.	21651.	691604.	69851984.	2449932.
TOTAL ANNUAL O&M COST	2219551.	1055.	56072.	5663260.	227060.
TOTAL ANNUAL COST	5010575.	3805.	143906.	14534515.	529790.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
5663260.	3492598.	5378600.	14534458.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2219551.	2219551.	2219551.	2219551.	0.	1.
100000. TO 500000.	420381.	105311.	222685.	1781162.	104319.	8.
50000. TO 100000.	96491.	52112.	71044.	710439.	14106.	10.
10000. TO 50000.	49265.	10170.	23162.	694848.	11907.	30.
0. TO 10000.	9739.	1055.	4948.	257290.	2487.	52.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	27470720.	13938733.	20704720.	41409440.	9568579.	2.
1000000. TO 5000000.	3440967.	1019651.	1845292.	27679392.	644551.	15.
500000. TO 1000000.	965007.	508328.	682197.	6821965.	145768.	10.
100000. TO 500000.	497428.	102873.	206608.	9503957.	111385.	46.
0. TO 100000.	99938.	27064.	67883.	1900727.	21117.	28.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	13566.	917.	3516.	2941.	84.	746.	0.	1037.	3.	9637.	0.	1127.
MIN	0.	1.	0.	0.	11.	0.	0.	9.	1.	0.	0.	0.
AVE	1121.	46.	207.	88.	36.	136.	0.	178.	2.	9637.	0.	800.
TOT	15698.	2931.	17632.	7735.	325.	5436.	0.	8027.	32.	9637.	0.	2399.
SD	3587.	121.	419.	323.	29.	169.	0.	223.	1.	0.	0.	405.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	480.	22.	1398.	261.	61.	57.	0.	58.	1.	14.	0.	48.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	58.	1.	38.	8.	19.	8.	0.	6.	0.	14.	0.	32.
TOT	812.	93.	3204.	685.	172.	334.	0.	249.	6.	14.	0.	95.
SD	125.	3.	156.	29.	23.	13.	0.	9.	0.	0.	0.	16.

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WEST VIRGINIA
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 101

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	12000.	33.	654.	66101.	1291.
FLOW (MGY)	20497.	7.	568.	57371.	2144.
TOTAL CAPITAL COST	13719141.	21651.	564322.	56996512.	1687589.
TOTAL ANNUAL O&M COST	1612738.	1055.	46208.	4667021.	165984.
TOTAL ANNUAL COST	3355068.	3805.	117878.	11905632.	365826.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4667021.	2849825.	4388729.	11905575.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1612738.	1612738.	1612738.	1612738.	0.	1.
100000. TO 500000.	307027.	105311.	184927.	1479419.	63980.	8.
50000. TO 100000.	89474.	52112.	69803.	628231.	12277.	9.
10000. TO 50000.	49265.	10170.	23945.	694391.	12553.	29.
0. TO 10000.	9739.	1055.	4672.	252270.	2364.	54.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	17148912.	11271961.	14210432.	28420864.	4155630.	2.
1000000. TO 5000000.	2513706.	1019651.	1687390.	25310864.	492363.	15.
500000. TO 1000000.	965007.	508328.	665941.	6659405.	155071.	10.
100000. TO 500000.	497428.	100162.	210357.	8624655.	115722.	41.
0. TO 100000.	99165.	27064.	67586.	2230323.	20332.	33.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	7354.	700.	2784.	2059.	84.	709.	0.	821.	3.	7735.	0.	1105.
MIN	0.	1.	0.	0.	11.	0.	0.	9.	1.	0.	0.	0.
AVE	640.	40.	187.	72.	36.	132.	0.	168.	1.	7735.	0.	784.
TOT	8959.	2544.	15911.	6323.	325.	5263.	0.	7559.	27.	7735.	0.	2351.
SD	1936.	94.	340.	230.	29.	163.	0.	202.	1.	0.	0.	397.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	356.	17.	1008.	189.	61.	49.	0.	43.	1.	12.	0.	43.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	45.	1.	30.	6.	19.	8.	0.	5.	0.	12.	0.	31.
TOT	628.	83.	2576.	560.	172.	315.	0.	224.	5.	12.	0.	93.
SD	92.	2.	113.	21.	23.	12.	0.	7.	0.	0.	0.	15.

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WISCONSIN
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 485

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10300.	6.	511.	247779.	916.
FLOW (MGY)	18724.	2.	499.	241921.	1468.
TOTAL CAPITAL COST	13785725.	11068.	404898.	196375296.	980459.
TOTAL ANNUAL O&M COST	552697.	666.	30409.	14748440.	74823.
TOTAL ANNUAL COST	2728882.	2071.	81828.	39686432.	197970.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
14748440.	5818764.	15120890.	39688080.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	952697.	648345.	800521.	1601041.	215211.	2.
100000. TO 500000.	476720.	102463.	195343.	6837021.	88214.	35.
50000. TO 100000.	98149.	50920.	73634.	1914488.	13285.	26.
10000. TO 50000.	49615.	10030.	20071.	3131051.	9530.	156.
0. TO 10000.	9965.	666.	4755.	1264906.	2637.	266.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	17482144.	6561512.	10646068.	42584272.	5102531.	4.
1000000. TO 5000000.	4322467.	1012275.	2092140.	115067712.	927800.	55.
500000. TO 1000000.	987918.	513529.	694725.	24315376.	156366.	35.
100000. TO 500000.	487613.	100093.	218738.	54465680.	96655.	249.
0. TO 100000.	96842.	13835.	63644.	9037442.	20630.	142.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	895.	256.	1189.	3834.	87.	2024.	34.	2836.	43.	0.	5293.	1415.
MIN	0.	1.	0.	0.	7.	0.	0.	8.	0.	0.	0.	0.
AVE	192.	20.	109.	99.	29.	273.	34.	175.	4.	0.	3350.	1140.
TOT	1920.	5830.	30277.	27598.	774.	59588.	34.	54156.	518.	0.	13400.	2279.
SD	258.	30.	142.	269.	24.	345.	0.	311.	5.	0.	1460.	389.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	114.	7.	288.	129.	82.	216.	2.	89.	17.	0.	520.	54.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	28.	1.	11.	7.	14.	25.	2.	6.	1.	0.	335.	43.
TOT	279.	274.	3135.	1911.	382.	5475.	2.	1724.	140.	0.	1340.	87.
SD	33.	1.	25.	13.	20.	44.	0.	10.	2.	0.	142.	14.

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WISCONSIN
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 485

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10300.	6.	511.	247779.	916.
FLOW (MGY)	18724.	2.	459.	222782.	1449.
TOTAL CAPITAL COST	13985725.	10037.	378744.	183690704.	972525.
TOTAL ANNUAL O&M COST	952697.	608.	27308.	13244483.	71669.
TOTAL ANNUAL COST	2728882.	1883.	75405.	36571536.	194409.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
13244483.	9184534.	14144177.	36573184.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	952697.	648345.	800521.	1601041.	215211.	2.
100000. TO 500000.	371124.	104051.	190358.	5901107.	79424.	31.
50000. TO 100000.	98053.	50920.	72924.	1823094.	12954.	25.
10000. TO 50000.	49615.	10029.	19534.	2559012.	9688.	131.
0. TO 10000.	9954.	608.	4596.	1360295.	2532.	296.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	17482144.	6561512.	10646068.	42584272.	5102531.	4.
1000000. TO 5000000.	4322467.	1012275.	2086742.	106423856.	913451.	51.
500000. TO 1000000.	987918.	513274.	683727.	22562976.	158633.	33.
100000. TO 500000.	497849.	100093.	204142.	47973312.	93522.	235.
0. TO 100000.	99842.	12546.	62163.	10070387.	20360.	162.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	379.	190.	789.	3834.	79.	2024.	34.	2836.	35.	0.	5293.	1348.
MIN	0.	1.	0.	0.	7.	0.	0.	8.	0.	0.	0.	0.
AVE	119.	17.	91.	91.	27.	264.	34.	170.	3.	0.	3350.	1086.
TOT	1186.	4818.	25380.	25426.	733.	57443.	34.	52672.	425.	0.	13400.	2172.
SD	107.	25.	116.	298.	22.	349.	0.	310.	4.	0.	1460.	371.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	66.	5.	161.	129.	64.	216.	2.	89.	13.	0.	520.	51.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	20.	1.	8.	6.	13.	24.	2.	5.	1.	0.	335.	41.
TOT	197.	242.	2292.	1678.	340.	5289.	2.	1676.	106.	0.	1340.	83.
SD	18.	1.	16.	12.	17.	44.	0.	10.	1.	0.	142.	14.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WISCONSIN
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS.... 485

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10300.	6.	511.	247779.	916.
FLOW (MGY)	18724.	1.	428.	207457.	1442.
TOTAL CAPITAL COST	13985725.	8081.	352597.	171009392.	967434.
TOTAL ANNUAL O&M COST	952697.	506.	24943.	12097135.	70669.
TOTAL ANNUAL COST	2728882.	1532.	69719.	33813712.	192957.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
12097135.	8550469.	13167716.	33815312.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	952697.	648345.	800521.	1601041.	215211.	2.
100000. TO 500000.	371124.	104051.	203704.	5092591.	79034.	25.
50000. TO 100000.	98053.	52040.	73155.	1902039.	12871.	26.
10000. TO 50000.	49615.	10076.	19919.	2071622.	10294.	104.
0. TO 10000.	9769.	506.	4359.	1429906.	2486.	328.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	17482144.	6561512.	10646068.	42584272.	5102531.	4.
1000000. TO 5000000.	4322467.	1001477.	2079160.	97720560.	958093.	47.
500000. TO 1000000.	955281.	515357.	708038.	17700960.	162152.	25.
100000. TO 500000.	496442.	100058.	202933.	44239360.	102281.	218.
0. TO 100000.	99842.	10101.	60305.	11518225.	21740.	191.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	243.	190.	769.	3834.	66.	2028.	31.	2836.	28.	0.	5293.	1013.
MIN	0.	0.	0.	0.	5.	0.	0.	5.	0.	0.	0.	0.
AVE	69.	14.	78.	86.	22.	253.	31.	161.	3.	0.	3350.	816.
TOT	687.	3923.	21656.	23995.	594.	55108.	31.	49634.	349.	0.	13400.	1633.
SD	67.	22.	102.	298.	15.	352.	0.	307.	3.	0.	1860.	279.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	49.	4.	117.	129.	49.	216.	1.	89.	10.	0.	520.	39.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	13.	1.	6.	5.	8.	23.	1.	5.	1.	0.	335.	31.
TOT	133.	216.	1797.	1540.	223.	5114.	1.	1589.	81.	0.	1340.	63.
SD	14.	0.	12.	12.	11.	45.	0.	10.	1.	0.	142.	10.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WYOMING
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 11

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	550.	50.	201.	2213.	161.
FLOW (MGY)	1687.	18.	764.	8407.	572.
TOTAL CAPITAL COST	4146533.	38574.	1507139.	16578539.	1444122.
TOTAL ANNUAL O&M COST	248615.	2084.	99358.	1092939.	83594.
TOTAL ANNUAL COST	775225.	6983.	290765.	3198413.	265062.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1092939.	828927.	1276546.	3198411.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	248615.	115825.	191402.	765609.	56518.	4.
50000. TO 100000.	97825.	51822.	71408.	285631.	19190.	4.
10000. TO 50000.	25272.	14345.	19808.	39617.	7727.	2.
0. TO 10000.	2084.	2084.	2084.	2084.	0.	1.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	5183166.	5183166.	5183166.	5183166.	0.	1.
1000000. TO 5000000.	4462691.	1126567.	2376139.	14256834.	1419181.	6.
500000. TO 1000000.	856860.	856860.	856860.	856860.	0.	1.
100000. TO 500000.	247564.	130532.	189048.	378096.	82754.	2.
0. TO 100000.	48217.	48217.	48217.	48217.	0.	1.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	522.	110.	526.	181.	18.	565.	26.	269.	0.	0.	0.	3088.
MIN	0.	0.	22.	0.	0.	0.	0.	16.	0.	0.	0.	0.
AVE	347.	63.	259.	86.	18.	533.	26.	193.	0.	0.	0.	2334.
TOT	1389.	507.	2070.	861.	18.	1600.	26.	772.	0.	0.	0.	9335.
SD	167.	34.	178.	64.	0.	55.	0.	120.	0.	0.	0.	794.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	61.	3.	99.	15.	8.	47.	1.	7.	0.	0.	0.	130.
MIN	0.	0.	1.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	45.	2.	34.	7.	8.	44.	1.	5.	0.	0.	0.	99.
TOT	181.	15.	271.	70.	8.	131.	1.	20.	0.	0.	0.	395.
SD	16.	0.	32.	4.	0.	7.	0.	3.	0.	0.	0.	33.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WYOMING
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 11

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	550.	50.	201.	2213.	161.
FLOW (MGY)	1218.	18.	555.	6106.	392.
TOTAL CAPITAL COST	3165571.	38574.	1172925.	12902178.	1094067.
TOTAL ANNUAL O&M COST	191462.	2084.	76581.	842387.	63422.
TOTAL ANNUAL COST	593489.	6983.	225542.	2480961.	201181.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
842387.	645109.	993467.	2480962.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	191462.	183277.	166845.	500536.	24109.	3.
50000. TO 100000.	80550.	52147.	65082.	260328.	15078.	4.
10000. TO 50000.	39823.	10345.	26480.	79439.	12782.	3.
0. TO 10000.	2084.	2084.	2084.	2084.	0.	1.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3956963.	1132325.	2357849.	14147097.	1238422.	6.
500000. TO 1000000.	909220.	685091.	777156.	1554311.	186770.	2.
100000. TO 500000.	247564.	130532.	189048.	378096.	82756.	2.
0. TO 100000.	48217.	48217.	48217.	48217.	0.	1.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	343.	86.	407.	131.	18.	471.	26.	218.	0.	0.	0.	2393.
MIN	0.	0.	22.	0.	0.	0.	0.	16.	0.	0.	0.	0.
AVE	232.	49.	214.	63.	18.	885.	26.	157.	0.	0.	0.	1808.
TOT	927.	395.	1714.	627.	18.	1334.	26.	628.	0.	0.	0.	7233.
SD	107.	26.	136.	48.	0.	86.	0.	96.	0.	0.	0.	615.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	46.	2.	69.	10.	8.	36.	1.	6.	0.	0.	0.	101.
MIN	0.	0.	1.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	35.	2.	26.	5.	8.	33.	1.	4.	0.	0.	0.	77.
TOT	138.	13.	204.	53.	8.	100.	1.	17.	0.	0.	0.	308.
SD	12.	0.	22.	3.	0.	5.	0.	2.	0.	0.	0.	26.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WYOMING
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 11

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	550.	50.	201.	2213.	161.
FLOW (MGY)	847.	14.	359.	3950.	250.
TOTAL CAPITAL COST	2358689.	33203.	875465.	9630112.	818099.
TOTAL ANNUAL O&M COST	143034.	1773.	54866.	603287.	47704.
TOTAL ANNUAL COST	442080.	5990.	166028.	1826311.	151329.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
603287.	481506.	741518.	1826311.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	143038.	107109.	124682.	374045.	17976.	3.
50000. TO 100000.	56521.	56521.	56521.	56521.	0.	1.
10000. TO 50000.	38585.	14345.	28492.	170949.	9930.	6.
0. TO 10000.	1773.	1773.	1773.	1773.	0.	1.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2943361.	1175411.	2217832.	8871331.	757745.	4.
500000. TO 1000000.	886185.	713410.	828593.	2485779.	99755.	3.
100000. TO 500000.	306377.	130532.	213009.	639027.	88627.	3.
0. TO 100000.	41503.	41503.	41503.	41503.	0.	1.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	220.	85.	268.	90.	18.	383.	26.	171.	0.	0.	0.	1799.
MIN	0.	0.	19.	0.	0.	0.	0.	14.	0.	0.	0.	0.
AVE	151.	36.	158.	41.	18.	361.	26.	124.	0.	0.	0.	1359.
TOT	605.	291.	1267.	409.	18.	1083.	26.	498.	0.	0.	0.	5436.
SD	67.	21.	89.	30.	0.	38.	0.	75.	0.	0.	0.	462.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	38.	2.	27.	6.	8.	27.	1.	4.	0.	0.	0.	77.
MIN	0.	0.	1.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	26.	1.	16.	4.	8.	24.	1.	3.	0.	0.	0.	58.
TOT	103.	11.	126.	35.	8.	73.	1.	13.	0.	0.	0.	234.
SD	9.	0.	10.	2.	0.	4.	0.	2.	0.	0.	0.	19.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

NATIONAL SUMMARIES
BY SPECIFIC
STANDARD INDUSTRIAL CLASSIFICATION

SIC Tables

Each table presents treatment costs for the specific SIC code number which appears at the upper left of the table. All information is at the most aggregated level of detail compatible with (1) industry integrity at the 2-digit SIC level, and (2) significant waste treatment considerations associated with the industry. As a result, some three and four-digit tables are presented. All information presented represents a total for establishments using 10 million gallons or more of water at that level of detail. There are five sets of tables. In each set the treatment costs were calculated using different water use per employee data.

The first set of tables uses unit water use efficiency as reported for 1968. The second set places the least efficient region's water use value equal to the next least efficient and calculates the costs. The third set reflects the use of median or higher water use efficiency, that is, in each SIC group all regional values below efficiency of the median region are calculated as equal to the median. The fourth presents costs for each SIC group with all regional efficiencies below the most efficient third made equal to the most efficient third. The fifth presents costs for each SIC group at a level equal to that for the most efficient water using region for the group.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 20
TOTAL NUMBER OF MANUFACTURING PLANTS... 4494

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5500.	3.	206.	924045.	325.
FLOW (MGY)	81468.	1.	190.	851952.	1363.
TOTAL CAPITAL COST	39821440.	16860.	221958.	997478400.	773152.
TOTAL ANNUAL O&M COST	3125120.	669.	12826.	57640544.	58535.
TOTAL ANNUAL COST	8182441.	2874.	41020.	184345824.	156483.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
57640544.	49873904.	76805792.	184320240.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3125120.	509459.	966711.	7733691.	885569.	8.
100000. TO 500000.	437336.	103672.	181067.	10139765.	77092.	56.
50000. TO 100000.	99476.	50012.	68576.	6514681.	14182.	95.
10000. TO 50000.	49174.	10004.	19628.	19117904.	9428.	974.
0. TO 10000.	9997.	669.	421.	14150137.	2384.	3361.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	49776800.	5560183.	11727417.	164133840.	11387870.	14.
1000000. TO 5000000.	4843651.	1005192.	1851542.	292543744.	890294.	158.
500000. TO 1000000.	999361.	503597.	673671.	183238464.	138983.	272.
100000. TO 500000.	499217.	100093.	211908.	498196736.	99556.	2351.
0. TO 100000.	99979.	21075.	64100.	108906496.	21274.	1699.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4044.	275.	21509.	87.	8209.	0.	6039.	43.	0.	0.	0.
MIN	0.	0.	0.	0.	8.	0.	0.	5.	1.	0.	0.	0.
AVE	0.	25.	24.	128.	20.	156.	0.	84.	5.	0.	0.	0.
TOT	0.	65416.	40349.	92837.	14227.	402887.	0.	377871.	3787.	0.	0.	0.
SD	0.	106.	24.	881.	10.	786.	0.	156.	5.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	50.	37.	695.	82.	2045.	0.	339.	17.	0.	0.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	2.	6.	6.	12.	0.	3.	1.	0.	0.	0.
TOT	0.	2237.	2368.	4718.	4592.	3075.	0.	12173.	797.	0.	0.	0.
SD	0.	1.	3.	30.	9.	51.	0.	6.	2.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 201
TOTAL NUMBER OF MANUFACTURING PLANTS... 729

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4000.	50.	278.	202517.	427.
FLOW (MGY)	3134.	18.	172.	125040.	313.
TOTAL CAPITAL COST	1193329.	45186.	157266.	114647104.	135301.
TOTAL ANNUAL O&M COST	136277.	2321.	11477.	8366908.	14110.
TOTAL ANNUAL COST	287830.	8214.	31448.	22925920.	31184.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
8366908.	5732354.	8827822.	22927072.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	136277.	108663.	121359.	606797.	12216.	5.
50000. TO 100000.	94934.	64888.	83186.	582301.	12132.	7.
10000. TO 50000.	49121.	10014.	19216.	4016138.	9568.	209.
0. TO 10000.	9949.	2321.	6224.	3161732.	1740.	508.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1491661.	1009335.	1228656.	12286562.	161967.	10.
500000. TO 1000000.	894929.	517064.	636336.	13363053.	88155.	21.
100000. TO 500000.	496868.	100317.	189083.	105886256.	84231.	560.
0. TO 100000.	99979.	56483.	85327.	11775103.	11265.	138.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	136.	0.	0.	87.	0.	0.	928.	43.	0.	0.	0.
MIN	0.	3.	0.	0.	8.	0.	0.	33.	1.	0.	0.	0.
AVE	0.	13.	0.	0.	20.	0.	0.	119.	5.	0.	0.	0.
TOT	0.	9666.	0.	0.	14227.	0.	0.	86965.	3787.	0.	0.	0.
SD	0.	15.	0.	0.	10.	0.	0.	105.	5.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	3.	0.	0.	82.	0.	0.	34.	17.	0.	0.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	0.	0.	6.	0.	0.	3.	1.	0.	0.	0.
TOT	0.	501.	0.	0.	4592.	0.	0.	2477.	797.	0.	0.	0.
SD	0.	0.	0.	0.	9.	0.	0.	3.	2.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 202
TOTAL NUMBER OF MANUFACTURING PLANTS... 1182

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2100.	18.	107.	126823.	155.
FLOW (MGY)	892.	4.	39.	46398.	59.
TOTAL CAPITAL COST	510658.	16860.	60089.	71024688.	44162.
TOTAL ANNUAL OEM COST	46887.	679.	3190.	3770074.	3249.
TOTAL ANNUAL COST	111741.	2874.	10821.	12790994.	8813.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
3770074.	3551234.	5468898.	12790206.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	46887.	10402.	16937.	558908.	8701.	33.
0. TO 10000.	9965.	679.	2795.	3211196.	1779.	1149.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	638323.	547213.	585227.	1755680.	47393.	3.
100000. TO 500000.	472044.	100265.	150158.	34986720.	56757.	233.
0. TO 100000.	99968.	21075.	55012.	52041456.	19837.	946.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	275.	0.	0.	0.	0.	236.	0.	0.	0.	0.
MIN	0.	0.	10.	0.	0.	0.	0.	7.	0.	0.	0.	0.
AVE	0.	0.	34.	0.	0.	0.	0.	26.	0.	0.	0.	0.
TOT	0.	0.	40349.	0.	0.	0.	0.	30673.	0.	0.	0.	0.
SD	0.	0.	24.	0.	0.	0.	0.	20.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL OEM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	37.	0.	0.	0.	0.	10.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	2.	0.	0.	0.	0.	1.	0.	0.	0.	0.
TOT	0.	0.	2368.	0.	0.	0.	0.	1402.	0.	0.	0.	0.
SD	0.	0.	3.	0.	0.	0.	0.	1.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 203
TOTAL NUMBER OF MANUFACTURING PLANTS... 691

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3360.	28.	213.	147275.	261.
FLOW (MGY)	3222.	16.	228.	157348.	328.
TOTAL CAPITAL COST	2144887.	73886.	336033.	232198992.	248986.
TOTAL ANNUAL O&M COST	142798.	2144.	15274.	10554117.	15260.
TOTAL ANNUAL COST	403228.	12039.	57967.	40041344.	46757.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
10554117.	11409948.	17879312.	40043376.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	142798.	114707.	129444.	388333.	14096.	3.
50000. TO 100000.	93117.	50368.	65089.	1431949.	13156.	22.
10000. TO 50000.	49174.	10004.	19281.	6709725.	9429.	348.
0. TO 10000.	9997.	2144.	6365.	2024175.	2005.	318.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2681108.	1011149.	1392705.	48744704.	419580.	35.
500000. TO 1000000.	977606.	503597.	686593.	96122992.	144994.	140.
100000. TO 500000.	491883.	102165.	283577.	144908080.	97292.	511.
0. TO 100000.	97389.	92358.	94942.	474711.	1790.	5.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	213.	0.	0.	0.	978.	0.	954.	0.	0.	0.	0.
MIN	0.	4.	0.	0.	0.	44.	0.	27.	0.	0.	0.	0.
AVE	0.	24.	0.	0.	0.	176.	0.	137.	0.	0.	0.	0.
TOT	0.	16446.	0.	0.	0.	121316.	0.	94432.	0.	0.	0.	0.
SD	0.	23.	0.	0.	0.	117.	0.	109.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4.	0.	0.	0.	107.	0.	31.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	0.	0.	0.	10.	0.	4.	0.	0.	0.	0.
TOT	0.	676.	0.	0.	0.	7157.	0.	2721.	0.	0.	0.	0.
SD	0.	1.	0.	0.	0.	11.	0.	3.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2041
TOTAL NUMBER OF MANUFACTURING PLANTS... 45

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1600.	125.	309.	13889.	284.
FLOW (MGY)	414.	20.	82.	3692.	77.
TOTAL CAPITAL COST	349300.	57104.	122264.	5501893.	63017.
TOTAL ANNUAL O&M COST	23707.	2562.	6463.	290821.	4458.
TOTAL ANNUAL COST	68068.	9814.	21990.	989563.	12444.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
290821.	275095.	423646.	989561.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	23707.	10753.	15228.	106599.	4930.	7.
0. TO 10000.	8913.	2962.	4848.	184223.	1573.	38.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	419160.	100585.	166866.	5673433.	76698.	34.
0. TO 100000.	99756.	68525.	84440.	928840.	10087.	11.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	215.	0.	135.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	39.	0.	18.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	79.	0.	43.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	3558.	0.	1944.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	38.	0.	25.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	19.	0.	5.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	2.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	5.	0.	2.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	208.	0.	83.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	4.	0.	1.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2042
TOTAL NUMBER OF MANUFACTURING PLANTS... 58

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1000.	115.	261.	15126.	194.
FLOW (MGY)	389.	21.	93.	5380.	71.
TOTAL CAPITAL COST	336605.	60056.	134291.	7788899.	57889.
TOTAL ANNUAL O&M COST	21721.	2368.	6916.	401135.	3789.
TOTAL ANNUAL COST	64469.	9595.	23971.	1390323.	11093.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
401135.	389445.	599745.	1390324.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	21721.	10011.	13253.	145781.	3495.	11.
0. TO 10000.	9887.	2368.	5433.	255354.	1812.	47.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	403926.	100247.	174875.	8568852.	66903.	49.
0. TO 100000.	97314.	72068.	86426.	777837.	9490.	9.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	207.	0.	129.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	41.	0.	20.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	87.	0.	48.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	5020.	0.	2769.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	35.	0.	23.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	17.	0.	5.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	5.	0.	2.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	290.	0.	112.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	3.	0.	1.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2043
TOTAL NUMBER OF MANUFACTURING PLANTS... 10

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4200.	430.	976.	9760.	1164.
FLOW (MGY)	349.	27.	93.	928.	96.
TOTAL CAPITAL COST	326017.	68982.	134727.	1347266.	74906.
TOTAL ANNUAL O&M COST	24231.	3240.	7455.	74549.	6307.
TOTAL ANNUAL COST	65635.	12000.	24565.	245652.	15797.

ANNUAL COST OF WASTE TREATMENT

	O&M	REPLACEMENT	INTEREST	TOTAL
*	74549.	67363.	103739.	245652.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	24231.	11307.	17769.	35538.	9139.	2.
0. TO 10000.	6909.	3240.	4876.	39012.	1103.	8.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	391220.	105721.	170438.	1533940.	90693.	9.
0. TO 100000.	82779.	82779.	82779.	82779.	0.	1.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	201.	0.	125.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	46.	0.	23.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	87.	0.	48.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	868.	0.	479.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	45.	0.	30.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	19.	0.	5.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	2.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	5.	0.	2.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	54.	0.	20.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	5.	0.	1.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. .THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2044
TOTAL NUMBER OF MANUFACTURING PLANTS... 9

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	450.	150.	219.	1975.	101.
FLOW (MGY)	312.	104.	189.	1705.	82.
TOTAL CAPITAL COST	256840.	134833.	188235.	1694112.	47649.
TOTAL ANNUAL O&M COST	16862.	5571.	10445.	94002.	4114.
TOTAL ANNUAL COST	48700.	22695.	34351.	309155.	10007.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
94002.	84706.	130447.	309154.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	16862.	10950.	13457.	67285.	2282.	5.
0. TO 10000.	9734.	5571.	6679.	26717.	2040.	4.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	308208.	161800.	225882.	2032936.	57178.	9.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	159.	0.	98.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	87.	0.	48.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	119.	0.	70.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	1068.	0.	626.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	28.	0.	19.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	13.	0.	4.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	4.	0.	2.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	8.	0.	3.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	71.	0.	23.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	3.	0.	1.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2045
TOTAL NUMBER OF MANUFACTURING PLANTS... 16

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	285.	50.	136.	2180.	82.
FLOW (MGY)	160.	28.	80.	1283.	44.
TOTAL CAPITAL COST	206910.	80423.	133767.	2140266.	45572.
TOTAL ANNUAL O&M COST	12059.	3139.	6560.	104964.	2754.
TOTAL ANNUAL COST	38336.	13615.	23549.	376778.	8453.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
104964.	107013.	164800.	376778.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	12059.	10215.	11137.	22273.	1304.	2.
0. TO 10000.	9467.	3139.	5907.	82691.	2223.	14.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	248292.	104137.	174914.	2273881.	50407.	13.
0. TO 100000.	98979.	96508.	98146.	294438.	1420.	3.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	131.	0.	75.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	53.	0.	27.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	87.	0.	47.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	1387.	0.	754.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	28.	0.	17.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	9.	0.	3.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	2.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	5.	0.	2.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	75.	0.	30.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	2.	0.	1.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2046
TOTAL NUMBER OF MANUFACTURING PLANTS... 21

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2700.	25.	537.	11279.	649.
FLOW (MGY)	3488.	20.	852.	17887.	941.
TOTAL CAPITAL COST	2463442.	100637.	864075.	18145584.	659589.
TOTAL ANNUAL O&M COST	142560.	2345.	41461.	870674.	38618.
TOTAL ANNUAL COST	455417.	15126.	151198.	3175159.	122217.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
870674.	907275.	1397209.	3175161.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	142560.	111458.	127009.	254018.	21992.	2.
50000. TO 100000.	91826.	50201.	66136.	396819.	14167.	6.
10000. TO 50000.	46079.	10800.	24505.	196043.	11856.	8.
0. TO 10000.	9488.	2345.	4759.	23794.	2768.	5.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3202472.	1247538.	1860593.	18605936.	635166.	10.
500000. TO 1000000.	899988.	539389.	701853.	3509265.	135152.	5.
100000. TO 500000.	403397.	130828.	245677.	1474063.	105356.	6.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	441.	0.	0.	0.	1114.	0.	908.	0.	0.	0.	0.
MIN	0.	9.	0.	0.	0.	61.	0.	31.	0.	0.	0.	0.
AVE	0.	134.	0.	0.	0.	422.	0.	308.	0.	0.	0.	0.
TOT	0.	2804.	0.	0.	0.	8863.	0.	6478.	0.	0.	0.	0.
SD	0.	119.	0.	0.	0.	267.	0.	244.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	7.	0.	0.	0.	111.	0.	25.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	3.	0.	0.	0.	31.	0.	8.	0.	0.	0.	0.
TOT	0.	54.	0.	0.	0.	655.	0.	162.	0.	0.	0.	0.
SD	0.	2.	0.	0.	0.	30.	0.	7.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS WITHIN A

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 205
TOTAL NUMBER OF MANUFACTURING PLANTS... 274

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2500.	195.	379.	103922.	274.
FLOW (MGY)	177.	7.	21.	5795.	18.
TOTAL CAPITAL COST	242588.	29877.	60758.	16647684.	27048.
TOTAL ANNUAL O&M COST	14644.	1310.	2854.	782131.	1405.
TOTAL ANNUAL COST	45453.	5104.	10571.	2896323.	4805.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
782131.	832384.	1281871.	2896386.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	14644.	14644.	14644.	14644.	0.	1.
0. TO 10000.	8677.	1310.	2811.	767487.	1211.	273.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	303235.	100878.	136900.	5749784.	40974.	42.
0. TO 100000.	99959.	37347.	64913.	15059847.	15977.	232.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	16.	0.	0.	0.	143.	0.	83.	0.	0.	0.	0.
MIN	0.	1.	0.	0.	0.	20.	0.	9.	0.	0.	0.	0.
AVE	0.	3.	0.	0.	0.	39.	0.	19.	0.	0.	0.	0.
TOT	0.	819.	0.	0.	0.	10672.	0.	5157.	0.	0.	0.	0.
SD	0.	2.	0.	0.	0.	16.	0.	9.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	1.	0.	0.	0.	10.	0.	3.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
TOT	0.	120.	0.	0.	0.	468.	0.	234.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2061
TOTAL NUMBER OF MANUFACTURING PLANTS... 49

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3450.	6.	195.	9544.	504.
FLOW (MGY)	81468.	165.	4822.	236266.	11934.
TOTAL CAPITAL COST	39821440.	459850.	3790706.	185744624.	5976919.
TOTAL ANNUAL O&M COST	3125120.	18508.	266359.	13051604.	470947.
TOTAL ANNUAL COST	8182441.	77515.	747774.	36640928.	1229663.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
13051604.	9287230.	14302329.	36641152.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3125120.	509459.	966711.	7733691.	885569.	8.
100000. TO 500000.	417336.	105674.	213074.	4048406.	108011.	19.
50000. TO 100000.	75963.	54625.	72463.	1014485.	10451.	14.
10000. TO 50000.	45577.	18508.	31879.	255031.	11036.	8.
0. TO 10000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	53758912.	5231141.	12169974.	182549616.	12005957.	15.
1000000. TO 5000000.	4605413.	1024012.	2183109.	65493296.	907237.	30.
500000. TO 1000000.	755214.	620797.	678104.	2712415.	65280.	4.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4064.	0.	21509.	0.	8209.	0.	6039.	0.	0.	0.	0.
MIN	0.	39.	0.	47.	0.	262.	0.	111.	0.	0.	0.	0.
AVE	0.	401.	0.	1314.	0.	1312.	0.	764.	0.	0.	0.	0.
TOT	0.	19648.	0.	64395.	0.	64287.	0.	37415.	0.	0.	0.	0.
SD	0.	622.	0.	3159.	0.	1315.	0.	947.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	50.	0.	695.	0.	2045.	0.	335.	0.	0.	0.	0.
MIN	0.	1.	0.	3.	0.	12.	0.	2.	0.	0.	0.	0.
AVE	0.	6.	0.	53.	0.	182.	0.	25.	0.	0.	0.	0.
TOT	0.	288.	0.	2594.	0.	8930.	0.	1240.	0.	0.	0.	0.
SD	0.	8.	0.	104.	0.	311.	0.	49.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2062
TOTAL NUMBER OF MANUFACTURING PLANTS... 18

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1500.	35.	389.	6995.	380.
FLOW (MGY)	1479.	38.	376.	6762.	471.
TOTAL CAPITAL COST	2842736.	184694.	760794.	13694294.	641887.
TOTAL ANNUAL O&M COST	188060.	6913.	38923.	700611.	42786.
TOTAL ANNUAL COST	549087.	30369.	135544.	2439783.	123944.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
700611.	684715.	1054460.	2439786.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	188060.	188060.	188060.	188060.	0.	1.
50000. TO 100000.	75581.	55123.	68195.	204584.	11352.	3.
10000. TO 50000.	45277.	18093.	27553.	275532.	10314.	10.
0. TO 10000.	9059.	6913.	8109.	32437.	1084.	4.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3837691.	1055905.	1825684.	12779794.	921862.	7.
500000. TO 1000000.	797603.	521402.	641971.	4493447.	104188.	7.
100000. TO 500000.	334585.	249337.	303512.	1214049.	37443.	4.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	299.	0.	651.	0.	1238.	0.	654.	0.	0.	0.	0.
MIN	0.	13.	0.	11.	0.	117.	0.	43.	0.	0.	0.	0.
AVE	0.	72.	0.	116.	0.	392.	0.	181.	0.	0.	0.	0.
TOT	0.	1289.	0.	2081.	0.	7059.	0.	3255.	0.	0.	0.	0.
SD	0.	69.	0.	152.	0.	275.	0.	148.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	5.	0.	34.	0.	132.	0.	17.	0.	0.	0.	0.
MIN	0.	1.	0.	1.	0.	4.	0.	1.	0.	0.	0.	0.
AVE	0.	2.	0.	6.	0.	27.	0.	4.	0.	0.	0.	0.
TOT	0.	29.	0.	113.	0.	483.	0.	76.	0.	0.	0.	0.
SD	0.	1.	0.	8.	0.	30.	0.	4.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2063
TOTAL NUMBER OF MANUFACTURING PLANTS... 60

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	400.	9.	125.	7498.	104.
FLOW (MGY)	3576.	68.	1045.	62703.	921.
TOTAL CAPITAL COST	3720409.	264008.	1549669.	92980176.	929961.
TOTAL ANNUAL O&M COST	276066.	12013.	96662.	5799703.	69590.
TOTAL ANNUAL COST	748558.	45542.	293470.	17608192.	187341.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
5799703.	4649008.	7159470.	17608176.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	276066.	103672.	179955.	3599094.	53051.	20.
50000. TO 100000.	99476.	50305.	71786.	1651067.	16195.	23.
10000. TO 50000.	48581.	12013.	32326.	549548.	13985.	17.
0. TO 10000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	5022550.	5022550.	5022550.	10045100.	0.	2.
1000000. TO 5000000.	4768540.	1070645.	2267306.	108830688.	1067030.	48.
500000. TO 1000000.	959815.	509263.	776370.	5434592.	165391.	7.
100000. TO 500000.	434402.	356410.	404320.	1212961.	41943.	3.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	402.	0.	1008.	0.	1484.	0.	826.	0.	0.	0.	0.
MIN	0.	20.	0.	20.	0.	160.	0.	63.	0.	0.	0.	0.
AVE	0.	157.	0.	312.	0.	719.	0.	361.	0.	0.	0.	0.
TOT	0.	9432.	0.	18721.	0.	43161.	0.	21667.	0.	0.	0.	0.
SD	0.	103.	0.	265.	0.	358.	0.	207.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	7.	0.	52.	0.	193.	0.	24.	0.	0.	0.	0.
MIN	0.	1.	0.	2.	0.	8.	0.	2.	0.	0.	0.	0.
AVE	0.	3.	0.	17.	0.	67.	0.	9.	0.	0.	0.	0.
TOT	0.	184.	0.	1008.	0.	4049.	0.	559.	0.	0.	0.	0.
SD	0.	2.	0.	13.	0.	49.	0.	6.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 207
TOTAL NUMBER OF MANUFACTURING PLANTS... 87

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3300.	90.	570.	49630.	522.
FLOW (MGY)	377.	15.	102.	8885.	80.
TOTAL CAPITAL COST	368596.	59165.	156609.	13625002.	72904.
TOTAL ANNUAL OGM COST	24811.	2410.	8287.	720990.	4917.
TOTAL ANNUAL COST	70989.	9924.	28176.	2451347.	14097.

ANNUAL COST OF WASTE TREATMENT

OGM	REPLACEMENT	INTEREST	TOTAL
720990.	681250.	1049124.	2451364.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	24811.	10076.	15443.	324293.	4295.	21.
0. TO 10000.	9994.	2410.	6011.	396697.	2122.	66.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	460745.	101002.	211771.	16094593.	86383.	76.
0. TO 100000.	95123.	73956.	85151.	936665.	7124.	11.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	28.	0.	0.	0.	210.	0.	131.	0.	0.	0.	0.
MIN	0.	3.	0.	0.	0.	39.	0.	18.	0.	0.	0.	0.
AVE	0.	10.	0.	0.	0.	54.	0.	53.	0.	0.	0.	0.
TOT	0.	855.	0.	0.	0.	8202.	0.	4568.	0.	0.	0.	0.
SD	0.	6.	0.	0.	0.	41.	0.	26.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL OGM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	2.	0.	0.	0.	18.	0.	5.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	0.	0.	0.	6.	0.	2.	0.	0.	0.	0.
TOT	0.	64.	0.	0.	0.	479.	0.	178.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	4.	0.	1.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 208
TOTAL NUMBER OF MANUFACTURING PLANTS... 646

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5500.	4.	207.	133488.	379.
FLOW (MGY)	4346.	1.	104.	67275.	311.
TOTAL CAPITAL COST	2263742.	17520.	168062.	108567904.	210505.
TOTAL ANNUAL O&M COST	184342.	819.	7410.	4786806.	13750.
TOTAL ANNUAL COST	471837.	3044.	28753.	18574608.	40275.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4786806.	5428394.	8359724.	18574912.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	184342.	159257.	171799.	343599.	17738.	2.
50000. TO 100000.	89925.	50920.	65170.	651705.	12534.	10.
10000. TO 50000.	47346.	10283.	20987.	1846865.	8635.	88.
0. TO 10000.	9957.	819.	3562.	1944750.	1932.	546.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2829677.	1005192.	1530862.	19901216.	572504.	13.
500000. TO 1000000.	999361.	504757.	664845.	31247696.	144388.	47.
100000. TO 500000.	498629.	100093.	187204.	66457520.	94047.	355.
0. TO 100000.	99848.	21900.	78383.	18106496.	14843.	231.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	151.	0.	0.	0.	1093.	0.	1019.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	12.	0.	5.	0.	0.	0.	0.
AVE	0.	7.	0.	0.	0.	96.	0.	65.	0.	0.	0.	0.
TOT	0.	4467.	0.	0.	0.	61897.	0.	42200.	0.	0.	0.	0.
SD	0.	12.	0.	0.	0.	107.	0.	92.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4.	0.	0.	0.	142.	0.	38.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	5.	0.	2.	0.	0.	0.	0.
TOT	0.	322.	0.	0.	0.	3162.	0.	1303.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	11.	0.	3.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 209
TOTAL NUMBER OF MANUFACTURING PLANTS... 599

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4000.	3.	137.	82144.	257.
FLOW (MGY)	5600.	3.	175.	104704.	366.
TOTAL CAPITAL COST	2084463.	19185.	186998.	112011920.	175021.
TOTAL ANNUAL O&M COST	243379.	669.	12167.	7288299.	17744.
TOTAL ANNUAL COST	508105.	3106.	35916.	21513856.	39747.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
7288299.	5600595.	8624913.	21513792.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	243379.	110672.	177866.	711465.	58335.	4.
50000. TO 100000.	87160.	50012.	58180.	581803.	10941.	10.
10000. TO 50000.	47186.	10046.	19581.	3994585.	8435.	204.
0. TO 10000.	9958.	669.	5251.	2000551.	2366.	381.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2605578.	1033089.	1707126.	10242758.	618331.	6.
500000. TO 1000000.	881068.	505399.	631032.	22717168.	108787.	36.
100000. TO 500000.	499217.	100121.	223734.	97995584.	101981.	438.
0. TO 100000.	99930.	23981.	76147.	9061503.	19579.	119.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	407.	0.	936.	0.	742.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	14.	0.	5.	0.	0.	0.	0.
AVE	0.	0.	0.	13.	0.	110.	0.	65.	0.	0.	0.	0.
TOT	0.	0.	0.	7635.	0.	65698.	0.	38678.	0.	0.	0.	0.
SD	0.	0.	0.	27.	0.	87.	0.	63.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	43.	0.	164.	0.	37.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	0.	2.	0.	8.	0.	3.	0.	0.	0.	0.
TOT	0.	0.	0.	1004.	0.	4749.	0.	1535.	0.	0.	0.	0.
SD	0.	0.	0.	3.	0.	12.	0.	3.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 22
TOTAL NUMBER OF MANUFACTURING PLANTS... 1071

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	9000.	35.	537.	548667.	602.
FLOW (MGY)	3944.	16.	212.	216613.	268.
TOTAL CAPITAL COST	1601387.	51579.	246214.	251384448.	172150.
TOTAL ANNUAL O&M COST	110565.	1815.	11119.	11352714.	9666.
TOTAL ANNUAL COST	275961.	8395.	42385.	43274656.	31020.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
11352714.	12569221.	19356592.	43278512.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
*> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	110565.	110565.	110565.	110565.	0.	1.
50000. TO 100000.	81627.	50933.	66937.	535499.	11155.	8.
10000. TO 50000.	49678.	10011.	17764.	6910052.	7888.	389.
0. TO 10000.	9996.	1815.	6094.	3796672.	2040.	623.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2001733.	1051042.	1301783.	23432096.	289421.	18.
500000. TO 1000000.	993253.	500009.	646762.	73730880.	122923.	114.
100000. TO 500000.	494314.	100633.	251704.	213696672.	100399.	849.
0. TO 100000.	99842.	64473.	84338.	3373509.	11305.	40.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	58.	261.	225.	0.	771.	0.	605.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	26.	0.	15.	0.	0.	0.	0.
AVE	0.	6.	40.	10.	0.	139.	0.	87.	0.	0.	0.	0.
TOT	0.	3483.	22482.	9309.	0.	127717.	0.	88887.	0.	0.	0.	0.
SD	0.	6.	30.	17.	0.	96.	0.	67.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	2.	21.	9.	0.	83.	0.	19.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	2.	1.	0.	7.	0.	2.	0.	0.	0.	0.
TOT	0.	264.	1067.	774.	0.	6771.	0.	2477.	0.	0.	0.	0.
SD	0.	0.	2.	1.	0.	7.	0.	2.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 221
TOTAL NUMBER OF MANUFACTURING PLANTS... 199

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	9000.	280.	865.	172225.	915.
FLOW (MGY)	2415.	74.	242.	48143.	259.
TOTAL CAPITAL COST	1280798.	147929.	293761.	58458400.	195171.
TOTAL ANNUAL O&M COST	81627.	4731.	11707.	2329701.	9100.
TOTAL ANNUAL COST	244288.	24100.	49015.	9754044.	28721.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2329701.	2922919.	4501294.	9753914.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	81627.	81627.	81627.	81627.	0.	1.
10000. TO 50000.	49678.	10181.	17525.	1419564.	8668.	81.
0. TO 10000.	9841.	4731.	7082.	828558.	1465.	117.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1600997.	1080500.	1238244.	4952976.	243301.	4.
500000. TO 1000000.	957721.	500590.	650887.	16923072.	120370.	26.
100000. TO 500000.	493841.	184911.	302943.	51197296.	80343.	169.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	100.	0.	668.	0.	512.	0.	0.	0.	0.
MIN	0.	0.	0.	3.	0.	93.	0.	52.	0.	0.	0.	0.
AVE	0.	0.	0.	10.	0.	174.	0.	109.	0.	0.	0.	0.
TOT	0.	0.	0.	2073.	0.	34657.	0.	21728.	0.	0.	0.	0.
SD	0.	0.	0.	11.	0.	82.	0.	62.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	7.	0.	61.	0.	14.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	3.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	1.	0.	8.	0.	3.	0.	0.	0.	0.
TOT	0.	0.	0.	154.	0.	1666.	0.	509.	0.	0.	0.	0.
SD	0.	0.	0.	1.	0.	7.	0.	2.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 222
TOTAL NUMBER OF MANUFACTURING PLANTS... 105

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2100.	125.	444.	46589.	367.
FLOW (MGY)	670.	33.	118.	12349.	99.
TOTAL CAPITAL COST	505656.	70890.	151249.	15881130.	69324.
TOTAL ANNUAL O&M COST	27752.	2312.	5846.	613801.	3438.
TOTAL ANNUAL COST	91970.	11465.	25054.	2630673.	12182.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
613801.	794056.	1222846.	2630703.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	27752.	10092.	14448.	130028.	5478.	9.
0. TO 10000.	9543.	2312.	5039.	483773.	1657.	96.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	632070.	632070.	632070.	632070.	0.	1.
100000. TO 500000.	479225.	108329.	190442.	18663280.	73828.	98.
0. TO 100000.	99651.	88612.	92663.	555980.	4245.	6.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	58.	261.	0.	0.	0.	0.	187.	0.	0.	0.	0.
MIN	0.	6.	40.	0.	0.	0.	0.	25.	0.	0.	0.	0.
AVE	0.	14.	82.	0.	0.	0.	0.	55.	0.	0.	0.	0.
TOT	0.	1503.	8592.	0.	0.	0.	0.	5786.	0.	0.	0.	0.
SD	0.	8.	35.	0.	0.	0.	0.	26.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	2.	21.	0.	0.	0.	0.	5.	0.	0.	0.	0.
MIN	0.	1.	1.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	4.	0.	0.	0.	0.	1.	0.	0.	0.	0.
TOT	0.	66.	400.	0.	0.	0.	0.	149.	0.	0.	0.	0.
SD	0.	0.	3.	0.	0.	0.	0.	1.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 223
TOTAL NUMBER OF MANUFACTURING PLANTS... 100

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3000.	180.	480.	48047.	440.
FLOW (MGY)	2276.	100.	365.	36497.	331.
TOTAL CAPITAL COST	1601387.	241718.	504966.	50496592.	243533.
TOTAL ANNUAL O&M COST	72731.	6881.	18416.	1841596.	11748.
TOTAL ANNUAL COST	275561.	37579.	82547.	8254714.	42585.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1841596.	2524829.	3888235.	8254660.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	72731.	72585.	72658.	145316.	91.	2.
10000. TO 50000.	46644.	10011.	19076.	1545190.	8797.	81.
0. TO 10000.	9996.	6881.	8888.	151097.	782.	17.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2001733.	1064657.	1353503.	13535033.	329093.	10.
500000. TO 1000000.	993253.	514296.	668770.	32100976.	136736.	48.
100000. TO 500000.	494314.	302148.	416316.	17485264.	48432.	42.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	225.	0.	771.	0.	605.	0.	0.	0.	0.
MIN	0.	0.	0.	11.	0.	145.	0.	86.	0.	0.	0.	0.
AVE	0.	0.	0.	39.	0.	279.	0.	187.	0.	0.	0.	0.
TOT	0.	0.	0.	3906.	0.	27932.	0.	18658.	0.	0.	0.	0.
SD	0.	0.	0.	34.	0.	117.	0.	93.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	9.	0.	52.	0.	12.	0.	0.	0.	0.
MIN	0.	0.	0.	1.	0.	5.	0.	2.	0.	0.	0.	0.
AVE	0.	0.	0.	2.	0.	13.	0.	4.	0.	0.	0.	0.
TOT	0.	0.	0.	201.	0.	1277.	0.	363.	0.	0.	0.	0.
SD	0.	0.	0.	1.	0.	8.	0.	2.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 226
TOTAL NUMBER OF MANUFACTURING PLANTS... 164

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3250.	50.	264.	43314.	350.
FLOW (MGY)	3944.	57.	318.	52216.	421.
TOTAL CAPITAL COST	1297435.	97893.	276032.	45269184.	155102.
TOTAL ANNUAL O&M COST	110565.	4450.	15887.	2605405.	12730.
TOTAL ANNUAL COST	275339.	16882.	50943.	8354692.	32341.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2605405.	2263459.	3485725.	8354589.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	110565.	110565.	110565.	110565.	0.	1.
50000. TO 100000.	74120.	59933.	59781.	179342.	12532.	3.
10000. TO 50000.	49492.	10065.	18475.	1865967.	8064.	101.
0. TO 10000.	9943.	4450.	7620.	449557.	1586.	59.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1621793.	1199966.	1410879.	2821759.	298278.	2.
500000. TO 1000000.	898743.	500009.	637613.	14027485.	120140.	22.
100000. TO 500000.	483293.	122367.	283840.	39737584.	87124.	140.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	102.	0.	676.	0.	519.	0.	0.	0.	0.
MIN	0.	0.	0.	2.	0.	63.	0.	33.	0.	0.	0.	0.
AVE	0.	0.	0.	9.	0.	165.	0.	102.	0.	0.	0.	0.
TOT	0.	0.	0.	1496.	0.	27113.	0.	16661.	0.	0.	0.	0.
SD	0.	0.	0.	11.	0.	82.	0.	62.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	9.	0.	83.	0.	19.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	3.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	1.	0.	11.	0.	3.	0.	0.	0.	0.
TOT	0.	0.	0.	177.	0.	1877.	0.	551.	0.	0.	0.	0.
SD	0.	0.	0.	1.	0.	10.	0.	2.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 24
TOTAL NUMBER OF MANUFACTURING PLANTS... 405

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	14500.	75.	369.	149384.	774.
FLOW (MGY)	7138.	28.	479.	193860.	721.
TOTAL CAPITAL COST	3082257.	80532.	459464.	186083056.	392184.
TOTAL ANNUAL O&M COST	235249.	2150.	24803.	10045325.	28722.
TOTAL ANNUAL COST	611219.	12530.	83152.	33676512.	78382.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
10045325.	9304152.	14328388.	33677856.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	235249.	101716.	155112.	1396009.	52034.	9.
50000. TO 100000.	99660.	52516.	71846.	2442750.	15268.	34.
10000. TO 50000.	49874.	10110.	4879.	5349049.	10226.	215.
0. TO 10000.	9970.	2150.	5834.	857575.	1993.	147.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3852821.	1001374.	1600251.	76812048.	638536.	48.
500000. TO 1000000.	998673.	500552.	702633.	96963312.	128008.	138.
100000. TO 500000.	499478.	100665.	268627.	58829312.	105486.	219.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	775.	0.	1164.	0.	1143.	0.	0.	0.	0.
MIN	0.	0.	0.	1.	0.	48.	0.	29.	0.	0.	0.	0.
AVE	0.	0.	0.	57.	0.	225.	0.	178.	0.	0.	0.	0.
TOT	0.	0.	0.	23006.	0.	91156.	0.	71918.	0.	0.	0.	0.
SD	0.	0.	0.	84.	0.	161.	0.	150.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	49.	0.	145.	0.	41.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	4.	0.	15.	0.	5.	0.	0.	0.	0.
TOT	0.	0.	0.	1776.	0.	6181.	0.	2088.	0.	0.	0.	0.
SD	0.	0.	0.	6.	0.	18.	0.	5.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 26
TOTAL NUMBER OF MANUFACTURING PLANTS... 862

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4000.	12.	447.	385511.	540.
FLOW (MGY)	107829.	8.	3497.	3014715.	10048.
TOTAL CAPITAL COST	52907440.	25804.	1799236.	1550941440.	4568654.
TOTAL ANNUAL O&M COST	3956620.	898.	131282.	113165136.	333284.
TOTAL ANNUAL COST	10675863.	4190.	359742.	310097408.	907733.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
113165136.	77547056.	119422432.	310134528.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3956620.	501852.	1173727.	59860080.	779103.	51.
100000. TO 500000.	492097.	100759.	212679.	34879312.	95797.	164.
50000. TO 100000.	99528.	50052.	70954.	10146433.	14171.	143.
10000. TO 50000.	49615.	10121.	26770.	7013743.	11427.	262.
0. TO 10000.	9957.	898.	5252.	1271037.	2419.	242.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	66134288.	5027460.	16730562.	1120947712.	13425577.	67.
1000000. TO 5000000.	4989713.	1008279.	2159297.	639152128.	1022028.	296.
500000. TO 1000000.	997063.	513131.	757471.	112105728.	127523.	148.
100000. TO 500000.	493215.	100205.	224477.	60159792.	107581.	268.
0. TO 100000.	99799.	32254.	77295.	6415444.	16570.	83.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	21838.	0.	6101.	0.	8930.	0.	0.	16679.	0.
MIN	0.	0.	0.	1.	0.	25.	0.	12.	0.	0.	2169.	0.
AVE	0.	0.	0.	570.	0.	569.	0.	618.	0.	0.	6632.	0.
TOT	0.	0.	0.	380867.	0.	490077.	0.	434506.	0.	0.	245402.	0.
SD	0.	0.	0.	1892.	0.	705.	0.	979.	0.	0.	3516.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	687.	0.	1882.	0.	565.	0.	0.	1735.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	213.	0.
AVE	0.	0.	0.	25.	0.	67.	0.	23.	0.	0.	626.	0.
TOT	0.	0.	0.	16631.	0.	57468.	0.	15888.	0.	0.	23177.	0.
SD	0.	0.	0.	61.	0.	127.	0.	49.	0.	0.	348.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 261
TOTAL NUMBER OF MANUFACTURING PLANTS... 37

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3000.	250.	922.	34108.	675.
FLOW (MGY)	107829.	4681.	31688.	1172462.	27712.
TOTAL CAPITAL COST	529C7440.	5249210.	18709264.	692243200.	11672933.
TOTAL ANNUAL O&M COST	3956620.	350638.	1240776.	4590872O.	833661.
TOTAL ANNUAL COST	10675863.	1017288.	3616859.	133823808.	2300798.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
45908720.	34612144.	53302688.	133823552.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3956620.	648345.	1343873.	44347840.	824706.	33.
100000. TO 500000.	478572.	350638.	390229.	1560917.	59489.	4.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	0.	0.	0.	0.	0.	0.
0. TO 10000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	66134288.	6561512.	23386560.	865303296.	14591223.	37.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	21838.	0.	5461.	0.	8930.	0.	0.	16679.	0.
MIN	0.	0.	0.	978.	0.	939.	0.	1163.	0.	0.	2169.	0.
AVE	0.	0.	0.	6116.	0.	2409.	0.	3552.	0.	0.	6632.	0.
TOT	0.	0.	0.	226283.	0.	89121.	0.	131439.	0.	0.	245402.	0.
SD	0.	0.	0.	5220.	0.	1083.	0.	1882.	0.	0.	3516.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	687.	0.	1007.	0.	527.	0.	0.	1735.	0.
MIN	0.	0.	0.	37.	0.	69.	0.	27.	0.	0.	213.	0.
AVE	0.	0.	0.	186.	0.	294.	0.	134.	0.	0.	626.	0.
TOT	0.	0.	0.	6887.	0.	10883.	0.	4962.	0.	0.	23177.	0.
SD	0.	0.	0.	152.	0.	218.	0.	117.	0.	0.	348.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 262
TOTAL NUMBER OF MANUFACTURING PLANTS... 274

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4000.	75.	554.	151858.	646.
FLOW (MGY)	45293.	199.	4041.	1107361.	6219.
TOTAL CAPITAL COST	12198796.	310102.	1833350.	502338048.	1625825.
TOTAL ANNUAL O&M COST	1521770.	14804.	146081.	40026160.	172014.
TOTAL ANNUAL COST	3071016.	54187.	378921.	103824368.	377035.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
40026160.	25116896.	38680000.	103823056.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1521770.	501852.	708376.	9917258.	279717.	14.
100000. TO 500000.	483134.	100759.	206027.	21838864.	91037.	106.
50000. TO 100000.	95528.	50052.	69820.	5795080.	13770.	83.
10000. TO 50000.	49332.	14804.	34869.	2475697.	9666.	71.
0. TO 10000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	15248465.	5027460.	7793952.	163672992.	2590898.	21.
1000000. TO 5000000.	4989713.	1008279.	2204992.	414538496.	1042298.	188.
500000. TO 1000000.	997063.	517233.	781536.	48455248.	129794.	62.
100000. TO 500000.	476414.	387628.	422424.	1267271.	47408.	3.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	4216.	0.	4000.	0.	3983.	0.	0.	0.	0.
MIN	0.	0.	0.	18.	0.	181.	0.	111.	0.	0.	0.	0.
AVE	0.	0.	0.	352.	0.	819.	0.	663.	0.	0.	0.	0.
TOT	0.	0.	0.	96408.	0.	224299.	0.	181643.	0.	0.	0.	0.
SD	0.	0.	0.	516.	0.	568.	0.	554.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	254.	0.	1005.	0.	264.	0.	0.	0.	0.
MIN	0.	0.	0.	2.	0.	10.	0.	3.	0.	0.	0.	0.
AVE	0.	0.	0.	22.	0.	101.	0.	24.	0.	0.	0.	0.
TOT	0.	0.	0.	5993.	0.	27570.	0.	6463.	0.	0.	0.	0.
SD	0.	0.	0.	28.	0.	116.	0.	28.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 263
TOTAL NUMBER OF MANUFACTURING PLANTS... 198

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4000.	12.	267.	52834.	439.
FLOW (MGY)	97120.	46.	3259.	645372.	8825.
TOTAL CAPITAL COST	21548032.	128102.	1450011.	287102208.	2028647.
TOTAL ANNUAL O&M COST	2950471.	5326.	115975.	22963120.	244244.
TOTAL ANNUAL COST	5687070.	21595.	300125.	59424784.	499276.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
22963120.	14355109.	22106848.	59425072.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2950471.	557865.	1398780.	5595120.	1061227.	4.
100000. TO 500000.	492097.	106490.	216789.	10839454.	98063.	50.
50000. TO 100000.	98257.	50393.	72578.	4136922.	14452.	57.
10000. TO 50000.	49035.	10479.	29741.	2319785.	9964.	78.
0. TO 10000.	9812.	5326.	8006.	72058.	1700.	9.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	26935040.	5136670.	10219404.	91974640.	7066793.	9.
1000000. TO 5000000.	4954611.	1027473.	2069341.	211072816.	1000913.	102.
500000. TO 1000000.	995335.	561756.	761415.	46446304.	119572.	61.
100000. TO 500000.	493215.	160128.	360977.	9385401.	96916.	26.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	8942.	0.	6101.	0.	6505.	0.	0.	0.	0.
MIN	0.	0.	0.	4.	0.	80.	0.	43.	0.	0.	0.	0.
AVE	0.	0.	0.	282.	0.	650.	0.	519.	0.	0.	0.	0.
TOT	0.	0.	0.	55772.	0.	128662.	0.	102667.	0.	0.	0.	0.
SD	0.	0.	0.	769.	0.	638.	0.	648.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	503.	0.	1882.	0.	565.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	3.	0.	2.	0.	0.	0.	0.
AVE	0.	0.	0.	17.	0.	79.	0.	19.	0.	0.	0.	0.
TOT	0.	0.	0.	3436.	0.	15676.	0.	3850.	0.	0.	0.	0.
SD	0.	0.	0.	41.	0.	158.	0.	45.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 264
TOTAL NUMBER OF MANUFACTURING PLANTS... 159

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4000.	65.	480.	76262.	543.
FLOW (MGY)	1539.	8.	179.	28518.	221.
TOTAL CAPITAL COST	520980.	25804.	134720.	21420512.	83223.
TOTAL ANNUAL O&M COST	56635.	898.	10110.	1607496.	9121.
TOTAL ANNUAL COST	122800.	4190.	27220.	4327918.	19621.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1607496.	1071025.	1649378.	4327899.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	56635.	56635.	56635.	56635.	0.	1.
10000. TO 50000.	49615.	10121.	18726.	973730.	9021.	52.
0. TO 10000.	9957.	898.	5445.	577155.	2512.	106.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	651225.	548931.	598834.	1796502.	51195.	3.
100000. TO 500000.	460970.	100266.	190635.	21922976.	79263.	115.
0. TO 100000.	99799.	32254.	74546.	3056368.	19091.	41.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	120.	0.	401.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	0.	1.	0.	25.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	0.	15.	0.	119.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	0.	2463.	0.	18958.	0.	0.	0.	0.	0.	0.
SD	0.	0.	0.	18.	0.	66.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	12.	0.	44.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	0.	2.	0.	8.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	0.	316.	0.	1292.	0.	0.	0.	0.	0.	0.
SD	0.	0.	0.	2.	0.	7.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 265
TOTAL NUMBER OF MANUFACTURING PLANTS... 142

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1770.	193.	401.	56974.	256.
FLOW (MGY)	1098.	9.	92.	13076.	122.
TOTAL CAPITAL COST	561107.	38036.	129793.	18430576.	80411.
TOTAL ANNUAL O&M COST	38275.	1530.	6686.	949406.	5576.
TOTAL ANNUAL COST	109536.	6360.	23169.	3290052.	15723.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
949406.	921529.	1419153.	3290087.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	38275.	11182.	17278.	380113.	6481.	22.
0. TO 10000.	9955.	1530.	4744.	569293.	2210.	120.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	701384.	701384.	701384.	701384.	0.	1.
100000. TO 500000.	484644.	100205.	191695.	18977792.	87858.	99.
0. TO 100000.	98592.	47538.	79978.	3359080.	13364.	42.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	333.	0.	228.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	76.	0.	12.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	84.	0.	46.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	11871.	0.	6560.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	48.	0.	32.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	31.	0.	7.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	5.	0.	2.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	685.	0.	264.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	4.	0.	1.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 266
TOTAL NUMBER OF MANUFACTURING PLANTS... 52

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1620.	45.	259.	13475.	349.
FLOW (MGY)	7823.	70.	930.	48345.	1747.
TOTAL CAPITAL COST	2372051.	158282.	567191.	29493952.	509810.
TOTAL ANNUAL O&M COST	176253.	5986.	32989.	1715450.	40344.
TOTAL ANNUAL COST	475877.	26088.	105023.	5461205.	104954.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1715450.	1474697.	2271033.	5461180.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	176253.	141456.	160154.	640616.	17881.	4.
50000. TO 100000.	97392.	60411.	78901.	157803.	26149.	2.
10000. TO 50000.	45995.	10187.	22166.	864489.	9386.	39.
0. TO 10000.	8774.	5986.	7508.	52556.	904.	7.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2965063.	1175394.	2258934.	13553604.	703752.	6.
500000. TO 1000000.	979134.	513131.	700314.	14706590.	125626.	21.
100000. TO 500000.	492148.	197853.	344300.	8607502.	86282.	25.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	1281.	0.	1091.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	102.	0.	57.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	332.	0.	236.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	17241.	0.	12253.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	272.	0.	238.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	144.	0.	32.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	4.	0.	2.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	26.	0.	7.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	1367.	0.	348.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	33.	0.	7.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA AT STORAGE LEVEL OF ZERO

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 28
TOTAL NUMBER OF MANUFACTURING PLANTS... 1421

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28600.	25.	550.	781889.	1398.
FLOW (MGY)	469987.	5.	2002.	2844331.	14484.
TOTAL CAPITAL COST	1007273984.	8881.	1714850.	2436803072.	27085024.
TOTAL ANNUAL O&M COST	13023192.	820.	90355.	128394048.	433950.
TOTAL ANNUAL COST	140946944.	1947.	308067.	437763328.	3825936.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
128394048.	121840144.	187633744.	437867776.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	13023192.	525777.	1625524.	63395440.	2092280.	39.
100000. TO 500000.	473046.	100263.	201872.	32501312.	97662.	161.
50000. TO 100000.	99383.	50076.	69505.	14596003.	14105.	210.
10000. TO 50000.	49574.	10021.	24110.	15888776.	10481.	659.
0. TO 10000.	9934.	820.	5738.	2019706.	2579.	352.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	1259092480.	5066823.	48269104.	2172110336.	186347264.	45.
1000000. TO 5000000.	4956188.	1001198.	2049698.	485778432.	1064316.	237.
500000. TO 1000000.	996108.	502534.	703312.	202553776.	138927.	288.
100000. TO 500000.	497658.	100448.	256577.	177550944.	107642.	692.
0. TO 100000.	99025.	11101.	51302.	8157022.	28813.	159.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	933376.	5127.	11186.	38936.	765.	3344.	83.	17886.	35.	0.	0.	0.
MIN	0.	2.	21.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	3341.	62.	287.	185.	41.	409.	39.	371.	9.	0.	0.	0.
TOT	1289643.	75604.	350450.	262304.	25237.	124759.	4114.	303838.	843.	0.	0.	0.
SD	47797.	215.	526.	1226.	60.	468.	11.	970.	8.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1458.	76.	3696.	1390.	3944.	526.	16.	2459.	13.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	23.	1.	43.	10.	46.	29.	3.	15.	2.	0.	0.	0.
TOT	9047.	1794.	52385.	14523.	28681.	8798.	287.	12666.	210.	0.	0.	0.
SD	94.	3.	147.	47.	203.	59.	3.	97.	3.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2812
TOTAL NUMBER OF MANUFACTURING PLANTS... 32

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2500.	87.	670.	21443.	689.
FLOW (MGY)	8004.	37.	1374.	43973.	1781.
TOTAL CAPITAL COST	2057240.	71390.	549775.	17592784.	474946.
TOTAL ANNUAL O&M COST	469985.	4702.	96114.	3075645.	107071.
TOTAL ANNUAL COST	731255.	13769.	165935.	5309928.	167134.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
3075645.	879639.	1354643.	5309927.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	469985.	112350.	202253.	2427040.	108243.	12.
50000. TO 100000.	79901.	54100.	64472.	322358.	11478.	5.
10000. TO 50000.	49150.	10791.	24099.	313290.	13829.	13.
0. TO 10000.	8260.	4702.	6481.	12962.	2516.	2.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2777272.	1095032.	1578608.	14207476.	565400.	9.
500000. TO 1000000.	925409.	519952.	703789.	5630314.	171031.	8.
100000. TO 500000.	480076.	149029.	272580.	3816123.	114156.	14.
0. TO 100000.	96377.	96377.	96377.	96377.	0.	1.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	115.	1359.	583.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	3.	65.	4.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	29.	413.	108.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	935.	13206.	3451.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	27.	319.	131.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4.	404.	62.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	82.	13.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	44.	2631.	401.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	1.	92.	14.	0.	0.	0.	0.	0.	0.	0.	0.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2819
TOTAL NUMBER OF MANUFACTURING PLANTS... 119

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1500.	25.	108.	12935.	212.
PLANT SIZE	6566.	32.	448.	51493.	745.
TOTAL CAPITAL COST	1777299.	56201.	265667.	30551760.	241920.
TOTAL ANNUAL O&M COST	387647.	3850.	35890.	4127399.	47266.
TOTAL ANNUAL COST	613363.	11009.	69630.	8007500.	77682.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4127399.	1527587.	2352484.	8007470.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
0 $ 500000.	0.	0.	0.	0.	0.	0.
500000. TO 900000.	387647.	104500.	173053.	1211368.	100088.	7.
100000. TO 500000.	92225.	50330.	67343.	1279526.	15089.	19.
10000. TO 50000.	48158.	10149.	24258.	1455457.	10347.	60.
0. TO 10000.	9881.	3850.	6246.	181069.	1545.	29.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
0 $ 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2396339.	1009629.	1468576.	7342880.	563319.	5.
500000. TO 1000000.	921618.	508033.	656234.	13124681.	127018.	20.
100000. TO 500000.	498762.	102984.	251071.	19834576.	108518.	79.
0. TO 100000.	98384.	75871.	85732.	943057.	7082.	11.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
***	0.	99.	1199.	479.	0.	0.	0.	0.	0.	0.	0.	0.
***	0.	2.	51.	3.	0.	0.	0.	0.	0.	0.	0.	0.
***	0.	13.	219.	37.	0.	0.	0.	0.	0.	0.	0.	0.
***	0.	1519.	24730.	4307.	0.	0.	0.	0.	0.	0.	0.	0.
***	0.	14.	173.	58.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
***	0.	3.	333.	91.	0.	0.	0.	0.	0.	0.	0.	0.
***	0.	0.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.
***	0.	1.	30.	5.	0.	0.	0.	0.	0.	0.	0.	0.
***	0.	99.	3962.	527.	0.	0.	0.	0.	0.	0.	0.	0.
***	0.	0.	41.	6.	0.	0.	0.	0.	0.	0.	0.	0.

** FOR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2869
TOTAL NUMBER OF MANUFACTURING PLANTS... 71

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1000.	26.	179.	12703.	218.
FLOW (MGD)	778.	13.	133.	9450.	163.
TOTAL CAPITAL COST	809451.	67039.	228201.	16202286.	163053.
TOTAL ANNUAL O&M COST	67905.	2490.	12771.	906728.	11934.
TOTAL ANNUAL COST	170709.	11004.	41752.	2964404.	32436.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
906728.	810114.	1247575.	2964416.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
150001. TO 500000.	0.	0.	0.	0.	0.	0.
50001. TO 100000.	67905.	67905.	67905.	67905.	0.	1.
10001. TO 50000.	48340.	10136.	19249.	615956.	10718.	32.
0. TO 10000.	9592.	2490.	5865.	222868.	2398.	38.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000001. TO 5000000.	1092757.	1092757.	1092757.	1092757.	0.	1.
500001. TO 1000000.	985804.	518337.	734565.	6611087.	149682.	9.
100001. TO 500000.	498580.	151253.	237035.	13985058.	99020.	59.
0. TO 100000.	93687.	90503.	92095.	184190.	2251.	2.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	57.	51.	220.	83.	51.	0.	0.	344.	0.	0.	0.	0.
[illegible]	8.	3.	20.	7.	8.	0.	0.	27.	0.	0.	0.	0.
[illegible]	15.	12.	68.	14.	23.	0.	0.	98.	0.	0.	0.	0.
[illegible]	1996.	875.	4836.	1029.	1437.	0.	0.	6969.	0.	0.	0.	0.
[illegible]	17.	11.	45.	17.	10.	0.	0.	71.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	10.	7.	16.	6.	26.	0.	0.	9.	0.	0.	0.	0.
[illegible]	0.	0.	1.	0.	1.	0.	0.	1.	0.	0.	0.	0.
[illegible]	2.	1.	3.	1.	5.	0.	0.	2.	0.	0.	0.	0.
[illegible]	123.	63.	184.	65.	332.	0.	0.	160.	0.	0.	0.	0.
[illegible]	2.	0.	3.	1.	5.	0.	0.	2.	0.	0.	0.	0.

[illegible] S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2816
TOTAL NUMBER OF MANUFACTURING PLANTS... 31

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1450.	75.	330.	10216.	319.
FLOW (MGY)	4978.	75.	808.	25054.	943.
TOTAL CAPITAL COST	1672038.	110785.	422904.	13110018.	303441.
TOTAL ANNUAL O&M COST	322873.	5299.	61272.	1899419.	60890.
TOTAL ANNUAL COST	935227.	27369.	114980.	3564388.	99207.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1899419.	655501.	1009471.	3564389.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	322873.	105395.	144377.	1010640.	79481.	7.
50000. TO 100000.	98768.	54640.	65703.	394220.	16707.	6.
10000. TO 50000.	46543.	10323.	29815.	477039.	11887.	16.
0. TO 10000.	9224.	8299.	8762.	17523.	654.	2.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2257250.	1071089.	1664169.	3328339.	838742.	2.
500000. TO 1000000.	992682.	507886.	724031.	9412408.	174714.	13.
100000. TO 500000.	463093.	149560.	309861.	4957774.	109217.	16.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MEAN	0.	93.	1199.	420.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	5.	99.	8.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	22.	333.	49.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	675.	10330.	2125.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	17.	210.	78.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MEAN	0.	3.	277.	43.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	1.	7.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	57.	8.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	39.	1619.	249.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	1.	52.	6.	0.	0.	0.	0.	0.	0.	0.	0.

** OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2818
TOTAL NUMBER OF MANUFACTURING PLANTS... 167

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10800.	50.	592.	98848.	1446.
FLOW (MGD)	469987.	97.	10490.	1751805.	40829.
TOTAL CAPITAL COST	1007273994.	198915.	10600058.	1770209792.	78597472.
TOTAL ANNUAL O&M COST	13023192.	11049.	383311.	64012960.	1190291.
TOTAL ANNUAL COST	140946944.	36311.	1729508.	288827904.	11069070.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
64012960.	88510480.	136306080.	288829440.

DISTRIBUTION OF DEPRECIATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
0 - 999999.	13023192.	525777.	2241562.	49314384.	2636974.	22.
1000000. TO 5000000.	473046.	100740.	227575.	10468463.	109466.	46.
500000. TO 1000000.	99113.	50412.	70156.	2455457.	12885.	35.
100000. TO 500000.	46574.	11049.	27733.	1774901.	11578.	64.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
0 - 9999999.	1359819264.	5016304.	68789888.	2201276672.	237681456.	32.
10000000. TO 50000000.	4979810.	1003745.	2123101.	148617072.	1080052.	70.
5000000. TO 10000000.	990374.	517793.	738549.	29541968.	141648.	40.
1000000. TO 5000000.	486630.	218536.	413984.	10349590.	59033.	25.
0. TO 1000000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
***	933376.	5127.	11186.	38936.	765.	0.	0.	17886.	0.	0.	0.	0.
***	37.	10.	61.	10.	19.	0.	0.	86.	0.	0.	0.	0.
***	7696.	216.	646.	919.	90.	0.	0.	1033.	0.	0.	0.	0.
***	1785732.	36044.	107808.	153556.	15070.	0.	0.	172498.	0.	0.	0.	0.
***	72960.	508.	1181.	3417.	96.	0.	0.	1911.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
***	1458.	76.	3696.	1390.	3944.	0.	0.	2459.	0.	0.	0.	0.
***	1.	1.	2.	1.	4.	0.	0.	2.	0.	0.	0.	0.
***	49.	4.	103.	39.	133.	0.	0.	55.	0.	0.	0.	0.
***	8767.	610.	17278.	6535.	22206.	0.	0.	9176.	0.	0.	0.	0.
***	139.	7.	336.	127.	375.	0.	0.	209.	0.	0.	0.	0.

*** OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2819
TOTAL NUMBER OF MANUFACTURING PLANTS... 237

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	14000.	90.	343.	81381.	1004.
FLOW (MGD)	29919.	36.	1105.	261969.	3072.
TOTAL CAPITAL COST	9610433.	60178.	436690.	103495520.	636605.
TOTAL ANNUAL O&M COST	1919277.	3900.	72641.	17215984.	157455.
TOTAL ANNUAL COST	2227801.	11825.	128100.	30359864.	237848.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
17215984.	5174775.	7969151.	30359888.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1915277.	532000.	909823.	5458939.	358440.	6.
100000. TO 500000.	439579.	103901.	190700.	4767500.	95529.	25.
50000. TO 100000.	98149.	51591.	70237.	3792777.	12403.	54.
10000. TO 50000.	46344.	10148.	25347.	2940222.	10758.	116.
0. TO 10000.	9739.	3900.	7129.	256632.	1685.	36.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	7574081.	6674738.	7124409.	14248819.	635910.	2.
1000000. TO 5000000.	4488472.	1012242.	1891769.	47294240.	1053847.	25.
500000. TO 1000000.	998783.	500838.	661770.	39044432.	109857.	59.
100000. TO 500000.	496353.	103113.	266084.	38582192.	111211.	145.
0. TO 100000.	99427.	81240.	91661.	549967.	7658.	6.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	0.	308.	3165.	2137.	0.	0.	0.	0.	0.	0.	0.	0.
[illegible]	0.	2.	55.	3.	0.	0.	0.	0.	0.	0.	0.	0.
[illegible]	0.	23.	327.	87.	0.	0.	0.	0.	0.	0.	0.	0.
[illegible]	0.	5379.	77572.	20544.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	36.	384.	223.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	0.	8.	1307.	200.	0.	0.	0.	0.	0.	0.	0.	0.
[illegible]	0.	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
[illegible]	0.	1.	62.	9.	0.	0.	0.	0.	0.	0.	0.	0.
[illegible]	0.	266.	14714.	2236.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	1.	136.	21.	0.	0.	0.	0.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 287
TOTAL NUMBER OF MANUFACTURING PLANTS... 208

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	8500.	125.	872.	181469.	1259.
PLANT SALES	27224.	57.	1445.	300513.	3333.
TOTAL CAPITAL COST	14111871.	283268.	1570537.	326671872.	1979835.
TOTAL ANNUAL O&M COST	1042844.	6894.	75354.	15673639.	134931.
TOTAL ANNUAL COST	2839091.	40329.	274812.	57160800.	385243.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
15673639.	16333592.	25153712.	57160928.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1042844.	555945.	744326.	4465957.	171991.	6.
100000. TO 500000.	440389.	110132.	185706.	5756886.	70994.	31.
50000. TO 100000.	98322.	50076.	69038.	2485352.	15138.	36.
10000. TO 50000.	47672.	10021.	23020.	2877522.	9364.	125.
0. TO 10000.	9953.	6894.	8793.	87934.	870.	10.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	17639824.	5066823.	9703161.	126141104.	4094547.	13.
1000000. TO 5000000.	4956188.	1017640.	2200427.	215641856.	1118356.	98.
500000. TO 1000000.	987918.	506701.	743081.	58703376.	133363.	79.
100000. TO 500000.	495109.	329085.	436582.	7858479.	41229.	18.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	0.	1228.	1706.	4489.	0.	3344.	0.	3345.	0.	0.	0.	0.
[illegible]	0.	14.	41.	12.	0.	124.	0.	71.	0.	0.	0.	0.
[illegible]	0.	119.	226.	260.	0.	542.	0.	423.	0.	0.	0.	0.
[illegible]	0.	24789.	47032.	56095.	0.	112807.	0.	87950.	0.	0.	0.	0.
SD	0.	179.	291.	969.	0.	512.	0.	494.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	0.	19.	218.	156.	0.	526.	0.	129.	0.	0.	0.	0.
[illegible]	0.	1.	1.	1.	0.	3.	0.	1.	0.	0.	0.	0.
[illegible]	0.	2.	14.	10.	0.	39.	0.	10.	0.	0.	0.	0.
[illegible]	0.	405.	2968.	2074.	0.	8207.	0.	2019.	0.	0.	0.	0.
SD	0.	2.	28.	20.	0.	69.	0.	16.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 281
TOTAL NUMBER OF MANUFACTURING PLANTS... 97

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10700.	212.	1082.	104929.	1578.
FLOW (MGY)	1229.	16.	193.	18684.	272.
TOTAL CAPITAL COST	1267232.	81144.	321734.	31208240.	273068.
TOTAL ANNUAL O&M COST	84012.	2865.	15757.	1528464.	17522.
TOTAL ANNUAL COST	241415.	13820.	56618.	5491931.	52013.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1528464.	1560411.	2403033.	5491908.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	84012.	60749.	72873.	437237.	8727.	6.
10000. TO 50000.	39826.	10491.	20713.	766379.	9539.	37.
0. TO 10000.	9934.	2865.	6016.	324858.	2004.	54.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1584040.	1022296.	1354751.	9483259.	187128.	7.
500000. TO 1000000.	935344.	563122.	764246.	10699446.	108763.	14.
100000. TO 500000.	496098.	101430.	247737.	18827984.	104622.	76.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	0.	47.	0.	229.	0.	407.	0.	553.	35.	0.	0.	0.
[illegible]	0.	2.	0.	3.	0.	38.	0.	36.	2.	0.	0.	0.
[illegible]	0.	10.	0.	36.	0.	123.	0.	144.	9.	0.	0.	0.
[illegible]	0.	1008.	0.	3483.	0.	11952.	0.	13922.	843.	0.	0.	0.
[illegible]	0.	10.	0.	49.	0.	87.	0.	120.	8.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	0.	7.	0.	17.	0.	34.	0.	18.	13.	0.	0.	0.
[illegible]	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
[illegible]	0.	1.	0.	3.	0.	6.	0.	4.	2.	0.	0.	0.
[illegible]	0.	80.	0.	272.	0.	561.	0.	395.	210.	0.	0.	0.
[illegible]	0.	0.	0.	4.	0.	7.	0.	4.	3.	0.	0.	0.

[illegible] OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 284
TOTAL NUMBER OF MANUFACTURING PLANTS... 105

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4000.	38.	514.	53930.	540.
FLOW (MGY)	869.	5.	59.	6166.	104.
TOTAL CAPITAL COST	160449.	8881.	30255.	3176827.	24270.
TOTAL ANNUAL O&M COST	39344.	820.	4549.	477602.	5384.
TOTAL ANNUAL COST	60483.	1947.	8391.	881063.	8439.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
477602.	158841.	244616.	881059.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 900000.	0.	0.	0.	0.	0.	0.
100000. TO 900000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	39344.	10093.	20083.	140578.	10751.	7.
0. TO 10000.	9789.	820.	3439.	337025.	2296.	98.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 9000000.	0.	0.	0.	0.	0.	0.
1000000. TO 9000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 900000.	208059.	108692.	152716.	610864.	47489.	4.
0. TO 100000.	99998.	11101.	33269.	3360177.	18454.	101.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	0.	0.	0.	36.	38.	0.	0.	92.	0.	0.	0.	0.
[illegible]	0.	0.	0.	0.	4.	0.	0.	4.	0.	0.	0.	0.
[illegible]	0.	0.	0.	3.	11.	0.	0.	16.	0.	0.	0.	0.
[illegible]	0.	0.	0.	304.	1171.	0.	0.	1701.	0.	0.	0.	0.
SD	0.	0.	0.	5.	6.	0.	0.	14.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	0.	0.	0.	5.	31.	0.	0.	4.	0.	0.	0.	0.
[illegible]	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
[illegible]	0.	0.	0.	0.	3.	0.	0.	1.	0.	0.	0.	0.
[illegible]	0.	0.	0.	46.	344.	0.	0.	88.	0.	0.	0.	0.
SD	0.	0.	0.	1.	4.	0.	0.	1.	0.	0.	0.	0.

SD FOR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 285
TOTAL NUMBER OF MANUFACTURING PLANTS... 81

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28600.	150.	688.	55692.	3153.
FLOW (MGY)	4359.	21.	187.	15146.	508.
TOTAL CAPITAL COST	1479333.	42857.	140726.	11398789.	175779.
TOTAL ANNUAL O&M COST	282736.	7699.	16309.	1321017.	33304.
TOTAL ANNUAL COST	470611.	8142.	34181.	2768649.	55551.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1321017.	569939.	877706.	2768662.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
0 - 999999.	0.	0.	0.	0.	0.	0.
500000. TO 900000.	282736.	282736.	282736.	282736.	0.	1.
90000. TO 100000.	79909.	57576.	68508.	205525.	11174.	3.
10000. TO 50000.	47637.	11053.	22282.	467929.	12084.	21.
0. TO 10000.	6883.	2699.	6515.	364833.	2281.	56.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
0 - 9999999.	0.	0.	0.	0.	0.	0.
1000000. TO 9000000.	1849166.	1849166.	1849166.	1849166.	0.	1.
500000. TO 1000000.	627815.	520809.	567526.	1702578.	54786.	3.
100000. TO 500000.	420527.	101020.	170508.	8695916.	82126.	51.
0. TO 100000.	96557.	53572.	76955.	2000840.	11165.	26.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	0.	82.	1038.	359.	0.	0.	0.	0.	0.	0.	0.	0.
[illegible]	0.	7.	39.	7.	0.	0.	0.	0.	0.	0.	0.	0.
[illegible]	0.	0.	119.	16.	0.	0.	0.	0.	0.	0.	0.	0.
[illegible]	0.	523.	9599.	1277.	0.	0.	0.	0.	0.	0.	0.	0.
*8	0.	10.	125.	41.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	0.	3.	243.	37.	0.	0.	0.	0.	0.	0.	0.	0.
[illegible]	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
[illegible]	0.	1.	14.	2.	0.	0.	0.	0.	0.	0.	0.	0.
[illegible]	0.	49.	1108.	165.	0.	0.	0.	0.	0.	0.	0.	0.
*8	0.	0.	29.	4.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 286
TOTAL NUMBER OF MANUFACTURING PLANTS... 23

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2000.	100.	376.	8654.	488.
(1000 EMPL)	2946.	27.	491.	11290.	685.
TOTAL CAPITAL COST	1764245.	80621.	350786.	8068081.	295942.
TOTAL ANNUAL O&M COST	135390.	3828.	26974.	620396.	31362.
TOTAL ANNUAL COST	245549.	14066.	71524.	1645042.	68611.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
620396.	403404.	621242.	1645042.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	135390.	135390.	135390.	135390.	0.	1.
50000. TO 100000.	78586.	72890.	75737.	151474.	4026.	2.
10000. TO 50000.	48366.	10241.	21087.	285832.	12665.	13.
0. TO 10000.	8658.	3828.	6814.	47701.	1836.	7.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1980306.	1001878.	1291091.	2582183.	409011.	2.
500000. TO 1000000.	942902.	516006.	700631.	4203783.	175946.	6.
100000. TO 500000.	436438.	100776.	219943.	3299141.	86988.	15.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	0.	97.	356.	192.	68.	0.	0.	559.	0.	0.	0.	0.
[illegible]	0.	4.	28.	2.	11.	0.	0.	36.	0.	0.	0.	0.
[illegible]	0.	27.	107.	34.	27.	0.	0.	160.	0.	0.	0.	0.
[illegible]	0.	515.	2460.	784.	626.	0.	0.	3682.	0.	0.	0.	0.
[illegible]	0.	27.	93.	45.	15.	0.	0.	132.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	0.	2.	39.	15.	61.	0.	0.	19.	0.	0.	0.	0.
[illegible]	0.	1.	1.	0.	1.	0.	0.	1.	0.	0.	0.	0.
[illegible]	0.	1.	7.	3.	12.	0.	0.	4.	0.	0.	0.	0.
[illegible]	0.	20.	166.	60.	275.	0.	0.	102.	0.	0.	0.	0.
[illegible]	0.	1.	9.	3.	14.	0.	0.	4.	0.	0.	0.	0.

SD ON S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 287
TOTAL NUMBER OF MANUFACTURING PLANTS... 106

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1900.	70.	248.	26328.	425.
FLOW (MGD)	21239.	169.	1800.	190769.	3374.
TOTAL CAPITAL COST	1809469.	99493.	320182.	3393928.	326726.
TOTAL ANNUAL O&M COST	665204.	12448.	71587.	7588233.	110882.
TOTAL ANNUAL COST	905919.	25083.	112251.	11898561.	152009.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
7588233.	1696966.	2613326.	11898525.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	665204.	655894.	660549.	1321098.	6626.	2.
100000. TO 500000.	430331.	100263.	214752.	3221276.	97033.	15.
10000. TO 100000.	67301.	12448.	66009.	1254173.	15481.	19.
0. TO 10000.	0.	0.	25596.	1791700.	8671.	70.
			0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2374336.	1001198.	1539074.	13851674.	523259.	9.
500000. TO 1000000.	838016.	516767.	693561.	6935614.	121040.	10.
100000. TO 500000.	488135.	124366.	248703.	21637120.	87644.	87.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MEAN	0.	0.	934.	770.	152.	0.	83.	0.	0.	0.	0.	0.
S.D.	0.	0.	50.	7.	17.	0.	25.	0.	0.	0.	0.	0.
SUM	0.	0.	170.	71.	40.	0.	39.	0.	0.	0.	0.	0.
NO	0.	0.	18052.	7488.	4286.	0.	4114.	0.	0.	0.	0.	0.
NO	0.	0.	164.	129.	25.	0.	11.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MEAN	0.	0.	229.	79.	345.	0.	16.	0.	0.	0.	0.	0.
S.D.	0.	1.	3.	1.	7.	0.	1.	0.	0.	0.	0.	0.
SUM	0.	0.	22.	8.	39.	0.	3.	0.	0.	0.	0.	0.
NO	0.	0.	2381.	816.	4104.	0.	287.	0.	0.	0.	0.	0.
NO	0.	0.	97.	13.	58.	0.	3.	0.	0.	0.	0.	0.

NO OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 289
TOTAL NUMBER OF MANUFACTURING PLANTS... 148

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20000.	49.	769.	113861.	2079.
PLANT (MGY)	24805.	40.	1071.	158518.	2860.
TOTAL CAPITAL COST	6171833.	78678.	481759.	71300368.	748842.
TOTAL ANNUAL O&M COST	1276857.	5919.	67260.	9954414.	148079.
TOTAL ANNUAL COST	2060679.	15911.	128442.	19009472.	242709.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
9954414.	3565018.	5490125.	19009552.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 900000.	1276897.	646666.	945058.	2835175.	316422.	3.
300000. TO 900000.	450966.	118726.	201293.	3220688.	107597.	16.
50000. TO 100000.	97923.	50187.	72918.	1750040.	18370.	24.
10000. TO 50000.	49381.	11228.	23319.	1982143.	9930.	85.
0. TO 10000.	9733.	5919.	8320.	166392.	1090.	20.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 9000000.	7714791.	5733658.	6724224.	13448449.	1400868.	2.
1000000. TO 9000000.	4136982.	1011438.	1837403.	29398448.	966769.	16.
900000. TO 1000000.	996108.	902536.	965130.	21949280.	146188.	33.
100000. TO 900000.	490451.	120774.	252413.	24231648.	81732.	96.
0. TO 100000.	98347.	98347.	98347.	98347.	0.	1.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	522.	310.	2400.	1590.	105.	0.	0.	1237.	0.	0.	0.	0.
MIN	6.	2.	43.	5.	6.	0.	0.	19.	0.	0.	0.	0.
AVG	23.	23.	230.	67.	18.	0.	0.	116.	0.	0.	0.	0.
TOT	3379.	3351.	34896.	9869.	2650.	0.	0.	17161.	0.	0.	0.	0.
SD	54.	39.	368.	180.	14.	0.	0.	159.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	84.	9.	767.	149.	166.	0.	0.	72.	0.	0.	0.	0.
MIN	0.	0.	3.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVG	8.	1.	99.	7.	10.	0.	0.	5.	0.	0.	0.	0.
TOT	717.	109.	5842.	1081.	1423.	0.	0.	726.	0.	0.	0.	0.
SD	16.	1.	92.	17.	20.	0.	0.	8.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 20
TOTAL NUMBER OF MANUFACTURING PLANTS... 314

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10000.	27.	381.	127318.	876.
FLOW (MGY)	25688.	4.	1288.	430310.	3420.
TOTAL CAPITAL COST	47004336.	26943.	3281673.	1096079104.	8614211.
TOTAL ANNUAL O&M COST	1983167.	1645.	145015.	48435088.	288365.
TOTAL ANNUAL COST	10419546.	5067.	561800.	187641136.	1376806.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
48435088.	54803936.	84398048.	187637072.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
0 500000.	1983167.	536277.	1093362.	22960608.	476330.	21.
100000. TO 500000.	489765.	100704.	215932.	17706448.	100370.	82.
50000. TO 100000.	98149.	52172.	69958.	4757137.	13054.	68.
10000. TO 50000.	49549.	10142.	27045.	2677496.	12740.	99.
0. TO 10000.	9821.	1645.	5240.	335365.	2227.	64.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
0 5000000.	8379568.	9063841.	19188080.	1036156416.	21070128.	54.
1000000. TO 5000000.	4895670.	1013979.	2245529.	285182208.	1093817.	127.
500000. TO 1000000.	597248.	508609.	764070.	30562784.	149051.	40.
100000. TO 500000.	478823.	1 1174.	221139.	15258577.	100932.	69.
0. TO 100000.	96969.	33679.	67634.	2975907.	17505.	44.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	37603.	419.	2325.	1047.	35.	0.	0.	212.	0.	0.	0.	26321.
[illegible]	9.	0.	10.	0.	0.	0.	0.	0.	0.	0.	0.	150.
[illegible]	597.	34.	252.	59.	11.	0.	0.	44.	0.	0.	0.	2796.
[illegible]	330560.	11917.	26080.	18518.	1103.	0.	0.	4543.	0.	0.	0.	645776.
[illegible]	4320.	63.	366.	149.	6.	0.	0.	39.	0.	0.	0.	4474.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	561.	8.	490.	65.	21.	0.	0.	8.	0.	0.	0.	911.
[illegible]	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.
[illegible]	39.	1.	37.	4.	1.	0.	0.	2.	0.	0.	0.	103.
[illegible]	11041.	387.	10929.	1352.	321.	0.	0.	186.	0.	0.	0.	23629.
[illegible]	73.	1.	70.	9.	4.	0.	0.	1.	0.	0.	0.	154.

[illegible] S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 291
TOTAL NUMBER OF MANUFACTURING PLANTS... 291

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10000.	35.	470.	108587.	1028.
FLOW (MGD)	25688.	32.	1821.	420705.	4000.
TOTAL CAPITAL COST	47004336.	208226.	4690767.	1083567360.	10048150.
TOTAL ANNUAL O&M COST	1983167.	10333.	204560.	47253344.	329815.
TOTAL ANNUAL COST	10419546.	36984.	800297.	184868688.	1599691.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
47253344.	54170352.	83436640.	184866336.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1983167.	536277.	1093362.	22960608.	476330.	21.
100000. TO 500000.	469761.	100706.	215932.	17706448.	100370.	82.
50000. TO 100000.	98169.	52172.	70364.	4501984.	13287.	64.
10000. TO 50000.	69569.	10333.	32585.	2085461.	11873.	64.
0. TO 10000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	81755608.	5063841.	19188080.	1036156416.	21070128.	54.
1000000. TO 5000000.	4895670.	1013979.	2245529.	285182208.	1093817.	127.
500000. TO 1000000.	993248.	538609.	778071.	28010560.	149509.	36.
100000. TO 500000.	478823.	260283.	366490.	5130860.	64113.	14.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	10	*20*	*30*	*40*	*50*	*60*	*70*	*80*	*90*	*10*	*11*	*12*
[illegible]	[illegible]	449.	2329.	1067.	0.	0.	0.	0.	0.	0.	0.	26321.
[illegible]	14.	3.	60.	7.	0.	0.	0.	0.	0.	0.	0.	150.
[illegible]	1626.	60.	367.	79.	0.	0.	0.	0.	0.	0.	0.	2796.
[illegible]	329411.	11084.	79050.	18232.	0.	0.	0.	0.	0.	0.	0.	645776.
[illegible]	9130.	77.	468.	169.	0.	0.	0.	0.	0.	0.	0.	4474.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	10	*20*	*30*	*40*	*50*	*60*	*70*	*80*	*90*	*10*	*11*	*12*
[illegible]	501.	0.	648.	85.	0.	0.	0.	0.	0.	0.	0.	911.
[illegible]	7.	0.	7.	0.	0.	0.	0.	0.	0.	0.	0.	6.
[illegible]	95.	1.	64.	6.	0.	0.	0.	0.	0.	0.	0.	103.
[illegible]	11811.	352.	10130.	1309.	0.	0.	0.	0.	0.	0.	0.	23829.
[illegible]	89.	1.	91.	11.	0.	0.	0.	0.	0.	0.	0.	194.

[illegible] OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 30
TOTAL NUMBER OF MANUFACTURING PLANTS... 459

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20000.	45.	663.	304302.	1295.
FLOW (MGY)	4897.	3.	134.	61498.	301.
TOTAL CAPITAL COST	2438279.	21613.	209045.	95951488.	187122.
TOTAL ANNUAL O&M COST	288072.	915.	13206.	6061358.	19347.
TOTAL ANNUAL COST	597733.	3660.	39755.	18247376.	42894.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
6061358.	4797574.	7388260.	18247184.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	288072.	149120.	197247.	591740.	78703.	3.
50000. TO 100000.	87816.	50947.	64382.	643819.	10784.	10.
10000. TO 50000.	48902.	10075.	17263.	3210960.	8388.	186.
0. TO 10000.	9930.	915.	6211.	1614950.	2324.	260.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3047848.	1018852.	1564028.	10948202.	753250.	7.
500000. TO 1000000.	943558.	502751.	678386.	17638032.	148156.	26.
100000. TO 500000.	498353.	121396.	230144.	87915104.	86445.	382.
0. TO 100000.	99021.	27016.	78176.	3439725.	16810.	44.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	187.	358.	354.	0.	863.	0.	676.	0.	0.	0.	0.
MIN	0.	1.	4.	0.	0.	12.	0.	5.	0.	0.	0.	0.
AVE	0.	11.	34.	10.	0.	98.	0.	56.	0.	0.	0.	0.
TOT	0.	5023.	15614.	4561.	0.	45004.	0.	25748.	0.	0.	0.	0.
SD	0.	13.	28.	22.	0.	72.	0.	53.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	6.	56.	40.	0.	152.	0.	34.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	2.	1.	0.	7.	0.	2.	0.	0.	0.	0.
TOT	0.	359.	957.	632.	0.	3057.	0.	1057.	0.	0.	0.	0.
SD	0.	0.	4.	3.	0.	10.	0.	2.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 31
TOTAL NUMBER OF MANUFACTURING PLANTS... 215

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3700.	60.	476.	102307.	504.
FLOW (MGY)	6349.	6.	238.	51165.	505.
TOTAL CAPITAL COST	2553192.	12165.	403606.	86775264.	466767.
TOTAL ANNUAL O&M COST	214222.	1061.	20028.	4306096.	26394.
TOTAL ANNUAL COST	456758.	2606.	71287.	15326736.	82708.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4306096.	4338762.	6681692.	15326550.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	214222.	114131.	150792.	603166.	43870.	4.
50000. TO 100000.	94026.	50403.	67894.	1018414.	12902.	15.
10000. TO 50000.	46835.	10076.	22725.	2454297.	9833.	108.
0. TO 10000.	9739.	1061.	2617.	230268.	2152.	88.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3191490.	1012275.	1531969.	55150896.	578229.	36.
500000. TO 1000000.	965007.	517147.	695352.	36158288.	128973.	52.
100000. TO 500000.	494153.	109181.	314806.	14795888.	119670.	47.
0. TO 100000.	61739.	15206.	29569.	2365488.	9246.	80.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	279.	1097.	609.	99.	0.	0.	720.	0.	0.	0.	0.
MIN	0.	22.	127.	21.	0.	0.	0.	8.	0.	0.	0.	0.
AVE	0.	75.	345.	115.	14.	0.	0.	124.	0.	0.	0.	0.
TOT	0.	8221.	37899.	12635.	1433.	0.	0.	26588.	0.	0.	0.	0.
SD	0.	50.	185.	108.	14.	0.	0.	121.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4.	101.	24.	175.	0.	0.	39.	0.	0.	0.	0.
MIN	0.	1.	5.	1.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	21.	5.	7.	0.	0.	3.	0.	0.	0.	0.
TOT	0.	160.	2269.	536.	721.	0.	0.	619.	0.	0.	0.	0.
SD	0.	1.	18.	4.	19.	0.	0.	5.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 311
TOTAL NUMBER OF MANUFACTURING PLANTS... 110

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1500.	60.	189.	20762.	181.
FLOW (MGY)	1583.	55.	287.	31568.	284.
TOTAL CAPITAL COST	2553192.	238052.	726152.	79876688.	450219.
TOTAL ANNUAL O&M COST	142311.	8143.	30563.	3361888.	25032.
TOTAL ANNUAL COST	456758.	38793.	122784.	13506291.	81988.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
3361888.	3993834.	6150501.	13506223.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	142311.	114131.	129648.	388944.	14305.	3.
50000. TO 100000.	94026.	50403.	68971.	896625.	12956.	13.
10000. TO 50000.	46835.	10107.	22978.	2022090.	10394.	88.
0. TO 10000.	9739.	8143.	9040.	54239.	676.	6.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3191490.	1012275.	1546522.	54128288.	579943.	35.
500000. TO 1000000.	969007.	517147.	695352.	36158288.	128973.	52.
100000. TO 500000.	477357.	297564.	415638.	9559665.	43183.	23.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	279.	1057.	609.	0.	0.	0.	608.	0.	0.	0.	0.
MIN	0.	22.	127.	21.	0.	0.	0.	68.	0.	0.	0.	0.
AVE	0.	75.	345.	115.	0.	0.	0.	192.	0.	0.	0.	0.
TOT	0.	8221.	37859.	12635.	0.	0.	0.	21122.	0.	0.	0.	0.
SD	0.	50.	185.	108.	0.	0.	0.	108.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4.	101.	24.	0.	0.	0.	13.	0.	0.	0.	0.
MIN	0.	1.	5.	1.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	21.	5.	0.	0.	0.	4.	0.	0.	0.	0.
TOT	0.	160.	2269.	536.	0.	0.	0.	396.	0.	0.	0.	0.
SD	0.	1.	18.	4.	0.	0.	0.	2.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 32
TOTAL NUMBER OF MANUFACTURING PLANTS... 945

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	8000.	50.	345.	325708.	586.
FLOW (MGY)	8698.	9.	254.	239949.	610.
TOTAL CAPITAL COST	3050324.	20021.	192872.	182264128.	246987.
TOTAL ANNUAL O&M COST	670264.	888.	22505.	21267280.	44207.
TOTAL ANNUAL COST	1057655.	3456.	46998.	44412640.	75204.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
21267280.	9113205.	14034330.	44414800.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	670264.	670264.	670264.	670264.	0.	1.
100000. TO 500000.	490543.	101703.	185117.	6108868.	93969.	33.
50000. TO 100000.	95850.	52885.	72392.	2606103.	14009.	36.
10000. TO 50000.	49749.	10058.	21306.	9758208.	9778.	458.
0. TO 10000.	9944.	888.	5095.	2124495.	2615.	417.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3812905.	1066433.	1673394.	43508256.	716224.	26.
500000. TO 1000000.	969729.	503048.	672200.	34282192.	143998.	51.
100000. TO 500000.	494852.	100554.	214824.	134909472.	90655.	628.
0. TO 100000.	9947.	25026.	63058.	15133957.	21531.	240.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	1763.	1287.	0.	322.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	17.	1.	0.	13.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	144.	36.	0.	63.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	136309.	34366.	0.	11588.	0.	0.	0.	0.	0.	0.
SD	0.	0.	157.	88.	0.	50.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	539.	131.	3.	34.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	18.	4.	0.	4.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	16671.	3949.	0.	648.	0.	0.	0.	0.	0.	0.
SD	0.	0.	35.	9.	0.	5.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 321
TOTAL NUMBER OF MANUFACTURING PLANTS... 23

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3000.	250.	931.	21408.	705.
FLOW (MGY)	1528.	122.	507.	11653.	405.
TOTAL CAPITAL COST	1143502.	203182.	474848.	10921500.	255864.
TOTAL ANNUAL O&M COST	172031.	16177.	56958.	1310045.	41527.
TOTAL ANNUAL COST	317256.	41981.	117264.	2697071.	73930.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1310045.	546075.	840955.	2697074.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	172031.	156321.	164176.	328352.	11109.	2.
50000. TO 100000.	95850.	52885.	76954.	538676.	14476.	7.
10000. TO 50000.	49265.	16177.	31644.	443020.	11759.	14.
0. TO 10000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1429377.	1303361.	1366369.	2732738.	89106.	2.
500000. TO 1000000.	962863.	505899.	701937.	7019372.	165539.	10.
100000. TO 500000.	469394.	253977.	354524.	3899766.	74431.	11.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	589.	232.	0.	322.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	113.	17.	0.	72.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	255.	71.	0.	149.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	5858.	1640.	0.	3423.	0.	0.	0.	0.	0.	0.
SD	0.	0.	130.	58.	0.	68.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	111.	27.	0.	34.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	10.	2.	0.	4.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	36.	9.	0.	12.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	838.	200.	0.	272.	0.	0.	0.	0.	0.	0.
SD	0.	0.	27.	7.	0.	8.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 322
TOTAL NUMBER OF MANUFACTURING PLANTS... 125

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	8000.	170.	766.	95739.	969.
FLOW (MGY)	1449.	5.	77.	9666.	165.
TOTAL CAPITAL COST	974138.	30675.	136097.	17012144.	113626.
TOTAL ANNUAL O&M COST	144238.	888.	10238.	1279762.	14922.
TOTAL ANNUAL COST	267953.	4784.	27522.	3440287.	29127.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1279762.	850607.	1309934.	3440303.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	144238.	144238.	144238.	144238.	0.	1.
50000. TO 100000.	55121.	55121.	55121.	55121.	0.	1.
10000. TO 50000.	44934.	10287.	18590.	613471.	8999.	33.
0. TO 10000.	9741.	888.	5188.	466943.	2256.	90.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1217673.	1217673.	1217673.	1217673.	0.	1.
500000. TO 1000000.	702848.	511217.	607033.	1214065.	135505.	2.
100000. TO 500000.	468175.	103263.	185759.	16161010.	88007.	87.
0. TO 100000.	99243.	38343.	76356.	2672463.	16180.	35.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	504.	196.	0.	276.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	17.	1.	0.	13.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	76.	11.	0.	49.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	9475.	1406.	0.	6131.	0.	0.	0.	0.	0.	0.
SD	0.	0.	60.	20.	0.	34.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	93.	22.	0.	29.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	6.	1.	0.	2.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	807.	186.	0.	287.	0.	0.	0.	0.	0.	0.
SD	0.	0.	10.	2.	0.	3.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 323
TOTAL NUMBER OF MANUFACTURING PLANTS... 36

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1100.	102.	259.	9333.	199.
FLOW (MGY)	344.	14.	76.	2735.	61.
TOTAL CAPITAL COST	413912.	55831.	155050.	5581804.	71244.
TOTAL ANNUAL O&M COST	49197.	2618.	10924.	393270.	8370.
TOTAL ANNUAL COST	101764.	9709.	30616.	1102160.	17218.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
393270.	279090.	429799.	1102158.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	49197.	10116.	17729.	248209.	10115.	14.
0. TO 10000.	9332.	2618.	6594.	145061.	1703.	22.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	517390.	517390.	517390.	517390.	0.	1.
100000. TO 500000.	396218.	102873.	190786.	6295939.	67836.	33.
0. TO 100000.	94142.	69788.	81965.	163930.	17221.	2.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	226.	52.	0.	136.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	32.	2.	0.	22.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	87.	12.	0.	56.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	3129.	423.	0.	2033.	0.	0.	0.	0.	0.	0.
SD	0.	0.	39.	9.	0.	23.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	31.	7.	0.	11.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	7.	2.	0.	2.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	247.	57.	0.	89.	0.	0.	0.	0.	0.	0.
SD	0.	0.	6.	1.	0.	2.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 324
TOTAL NUMBER OF MANUFACTURING PLANTS... 149

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1000.	75.	197.	29415.	135.
FLOW (MGY)	1776.	44.	261.	38959.	226.
TOTAL CAPITAL COST	775784.	68417.	208970.	31136512.	116810.
TOTAL ANNUAL O&M COST	114616.	5272.	24223.	3609271.	18617.
TOTAL ANNUAL COST	213141.	13995.	50763.	7563651.	33286.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
3609271.	1556825.	2397510.	7563606.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	114616.	102218.	109307.	327920.	6388.	3.
50000. TO 100000.	83842.	52982.	64176.	513408.	11734.	8.
10000. TO 50000.	48126.	10058.	22003.	2640354.	9105.	120.
0. TO 10000.	9535.	5272.	7089.	127598.	1179.	18.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	969729.	503048.	642325.	7065579.	159940.	11.
100000. TO 500000.	492533.	100554.	236022.	31390912.	90267.	133.
0. TO 100000.	97600.	85521.	92836.	464181.	5509.	5.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	548.	228.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	62.	6.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	172.	37.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	25558.	5579.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	85.	32.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	92.	22.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	20.	5.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	2920.	689.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	15.	4.	0.	0.	0.	0.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 325
TOTAL NUMBER OF MANUFACTURING PLANTS... 77

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2000.	130.	300.	23100.	280.
FLOW (MGY)	97.	6.	24.	1832.	21.
TOTAL CAPITAL COST	126703.	20021.	42893.	3302750.	22646.
TOTAL ANNUAL O&M COST	9743.	907.	2738.	210788.	2047.
TOTAL ANNUAL COST	25834.	3456.	8185.	630240.	4902.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
210788.	165137.	254312.	630237.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	0.	0.	0.	0.	0.	0.
0. TO 10000.	9743.	907.	2738.	210788.	2047.	77.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	158379.	103965.	123727.	989813.	17441.	8.
0. TO 100000.	89478.	25026.	45487.	3138637.	14795.	69.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	111.	15.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	19.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	39.	3.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	3037.	266.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	20.	3.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	8.	2.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	172.	38.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 326
TOTAL NUMBER OF MANUFACTURING PLANTS... 47

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1500.	80.	433.	20364.	407.
FLOW (MGY)	161.	6.	35.	1665.	32.
TOTAL CAPITAL COST	146377.	20768.	56446.	2652975.	30832.
TOTAL ANNUAL O&M COST	13370.	943.	4216.	198129.	3190.
TOTAL ANNUAL COST	30409.	3601.	11384.	535058.	7073.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
198129.	132649.	204279.	535057.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	13370.	10901.	12030.	36091.	1248.	3.
0. TO 10000.	9397.	943.	3683.	162038.	2502.	44.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	182972.	105676.	128814.	1545762.	21848.	12.
0. TO 100000.	87615.	25960.	50585.	1770462.	15706.	35.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	125.	21.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	20.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	51.	5.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	2406.	247.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	26.	5.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	11.	3.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	162.	36.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 327
TOTAL NUMBER OF MANUFACTURING PLANTS... 280

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	700.	50.	148.	41376.	102.
FLOW (MGY)	1979.	12.	214.	59846.	224.
TOTAL CAPITAL COST	876357.	30360.	177997.	49839120.	121318.
TOTAL ANNUAL O&M COST	120928.	1697.	20096.	5626862.	18842.
TOTAL ANNUAL COST	232225.	5553.	42702.	11956618.	34115.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
5626862.	2491955.	3837610.	11956427.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	120928.	101703.	112898.	451590.	8154.	4.
50000. TO 100000.	90024.	52945.	72796.	800758.	15069.	11.
10000. TO 50000.	46792.	10220.	20728.	3896851.	9311.	188.
0. TO 10000.	9941.	1697.	6204.	477704.	2399.	77.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1095446.	1095446.	1095446.	1095446.	0.	1.
500000. TO 1000000.	874562.	503565.	676983.	9477756.	122667.	14.
100000. TO 500000.	494852.	103919.	220672.	48327200.	83905.	219.
0. TO 100000.	99127.	37950.	73897.	3399265.	18413.	46.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	612.	264.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	29.	2.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	147.	31.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	41250.	8589.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	89.	38.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	97.	24.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	16.	4.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	4555.	1072.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	15.	4.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 328
TOTAL NUMBER OF MANUFACTURING PLANTS... 38

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	500.	54.	139.	5272.	101.
FLOW (MGY)	577.	22.	135.	5117.	117.
TOTAL CAPITAL COST	347601.	44744.	120963.	4976589.	68577.
TOTAL ANNUAL OEM COST	35764.	2406.	11582.	440121.	7679.
TOTAL ANNUAL COST	79909.	8089.	28214.	1072149.	16341.

ANNUAL COST OF WASTE TREATMENT

OEM	REPLACEMENT	INTEREST	TOTAL
440121.	248829.	383197.	1072147.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	35764.	10932.	19439.	272148.	7388.	14.
0. TO 10000.	9944.	2406.	6999.	167973.	2125.	24.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	434501.	100635.	185462.	5563872.	83677.	30.
0. TO 100000.	99477.	55930.	82109.	656870.	13948.	8.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	272.	75.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	41.	3.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	112.	19.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	4256.	721.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	53.	16.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL OEM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	29.	7.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	9.	2.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	357.	83.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 329
TOTAL NUMBER OF MANUFACTURING PLANTS... 170

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	6800.	50.	469.	79701.	864.
FLOW (MGY)	8698.	10.	638.	108492.	1295.
TOTAL CAPITAL COST	3050324.	26817.	334380.	56844608.	483135.
TOTAL ANNUAL O&M COST	670264.	1317.	48234.	8199765.	91263.
TOTAL ANNUAL COST	1057655.	4726.	90701.	15419112.	152081.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
8199769.	2842230.	4377032.	15419027.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	670264.	670264.	670264.	670264.	0.	1.
100000. TO 500000.	499543.	114078.	211164.	4856771.	101333.	23.
50000. TO 100000.	95351.	59515.	77572.	698150.	11987.	9.
10000. TO 50000.	49749.	10094.	22335.	1608148.	11112.	72.
0. TO 10000.	9509.	1317.	5638.	366474.	2300.	65.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3812905.	1066433.	1748292.	38462432.	754754.	22.
500000. TO 1000000.	920958.	516491.	691402.	8998223.	148324.	13.
100000. TO 500000.	454966.	101564.	218290.	20737504.	98293.	95.
0. TO 100000.	97927.	33546.	71705.	2868188.	17688.	40.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	1763.	1287.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	25.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	242.	91.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	41348.	15497.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	298.	188.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	539.	131.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	39.	9.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	6612.	1587.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	73.	18.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 33
TOTAL NUMBER OF MANUFACTURING PLANTS... 1137

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28000.	10.	902.	1025720.	2033.
FLOW (MGY)	96435.	3.	1602.	1821492.	6473.
TOTAL CAPITAL COST	150539616.	16809.	1425271.	1620533760.	7643658.
TOTAL ANNUAL O&M COST	6808742.	776.	129513.	147256128.	477325.
TOTAL ANNUAL COST	25927248.	2911.	310440.	352969984.	1426942.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
147256128.	81026672.	124781024.	353063680.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	6808742.	504294.	1687607.	92818416.	1427672.	55.
100000. TO 500000.	489468.	100787.	230822.	38085648.	102764.	165.
50000. TO 100000.	99775.	50490.	70707.	6010078.	13527.	85.
10000. TO 50000.	49531.	10144.	23233.	7806180.	10767.	336.
0. TO 10000.	9996.	776.	5127.	2543204.	2373.	496.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	188174512.	5044770.	24139504.	1472509952.	34355008.	61.
1000000. TO 5000000.	4763163.	1019747.	2168022.	333875456.	955257.	154.
500000. TO 1000000.	998590.	500588.	692608.	81035136.	137393.	117.
100000. TO 500000.	492505.	100430.	216890.	121458656.	100069.	560.
0. TO 100000.	99679.	21011.	69132.	16937280.	19107.	245.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	127753.	2354.	8050.	10028.	0.	836.	0.	2354.	0.	16948.	0.	0.
MIN	6.	1.	14.	0.	0.	0.	0.	31.	0.	0.	0.	0.
AVE	2224.	64.	381.	165.	0.	82.	0.	326.	0.	5967.	0.	0.
TOT	762954.	70334.	348661.	187774.	0.	59592.	0.	65915.	0.	125315.	0.	0.
SD	10874.	188.	756.	666.	0.	86.	0.	386.	0.	4130.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1363.	59.	4390.	813.	0.	153.	0.	183.	0.	21.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	79.	2.	100.	16.	0.	6.	0.	17.	0.	9.	0.	0.
TOT	26930.	2362.	1706.	18465.	0.	4251.	0.	3339.	0.	197.	0.	0.
SD	171.	5.	336.	57.	0.	12.	0.	26.	0.	5.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 331
TOTAL NUMBER OF MANUFACTURING PLANTS... 343

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28000.	75.	1582.	542753.	3291.
FLOW (MGY)	96435.	5.	4192.	1437994.	11198.
TOTAL CAPITAL COST	150539616.	26818.	3707271.	1271594240.	13498694.
TOTAL ANNUAL O&M COST	6808742.	1642.	350125.	120092816.	820206.
TOTAL ANNUAL COST	25927248.	5048.	820911.	281572608.	2502507.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
120092816.	63579696.	97912704.	281585152.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	6808742.	504294.	1741862.	90576832.	1449583.	52.
100000. TO 500000.	489468.	102574.	238721.	24110816.	106916.	101.
50000. TO 100000.	99293.	50758.	74666.	2837299.	13346.	38.
10000. TO 50000.	49093.	10158.	25997.	2235757.	10994.	86.
0. TO 10000.	9908.	1642.	5061.	334025.	2128.	66.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	188174512.	5044770.	27873888.	1310073088.	38340320.	47.
1000000. TO 5000000.	4477290.	1015747.	2167973.	218965280.	972681.	101.
500000. TO 1000000.	978817.	501016.	721907.	33207728.	141875.	46.
100000. TO 500000.	486636.	101760.	253184.	23292896.	104572.	92.
0. TO 100000.	97327.	33522.	70044.	3992502.	18537.	57.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	127753.	2354.	8050.	10028.	0.	0.	0.	2354.	0.	0.	0.	0.
MIN	6.	1.	19.	1.	0.	0.	0.	31.	0.	0.	0.	0.
AVE	2224.	158.	702.	430.	0.	0.	0.	326.	0.	0.	0.	0.
TOT	762954.	54313.	240886.	147521.	0.	0.	0.	65915.	0.	0.	0.	0.
SD	10874.	310.	1127.	1153.	0.	0.	0.	386.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1363.	59.	4391.	813.	0.	0.	0.	183.	0.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	79.	5.	217.	40.	0.	0.	0.	17.	0.	0.	0.	0.
TOT	26930.	1555.	74390.	13877.	0.	0.	0.	3339.	0.	0.	0.	0.
SD	171.	8.	523.	97.	0.	0.	0.	26.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 3312
TOTAL NUMBER OF MANUFACTURING PLANTS... 202

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28000.	180.	2420.	488906.	4063.
FLOW (MGY)	96435.	107.	7016.	1417262.	13920.
TOTAL CAPITAL COST	150539616.	193175.	6184434.	1249255680.	17175872.
TOTAL ANNUAL OEM COST	6808742.	20406.	580525.	117266144.	1007047.
TOTAL ANNUAL COST	25927248.	44939.	1365952.	275922432.	3150751.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
117266144.	62462768.	96192640.	275921408.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	6808742.	504294.	1741862.	90576832.	1449583.	52.
100000. TO 500000.	489468.	102574.	238958.	23656832.	107014.	99.
50000. TO 100000.	99293.	52008.	75700.	2270995.	13705.	30.
10000. TO 50000.	49093.	20406.	36298.	762262.	8176.	21.
0. TO 10000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	203228384.	5448349.	30193776.	1414878208.	41407536.	47.
1000000. TO 5000000.	4835471.	1039591.	2288484.	238002416.	1064263.	104.
500000. TO 1000000.	997526.	502253.	749101.	28465824.	139029.	38.
100000. TO 500000.	486382.	260786.	397491.	5167385.	67357.	13.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	127753.	2354.	8050.	10028.	0.	0.	0.	2354.	0.	0.	0.	0.
MIN	19.	15.	115.	13.	0.	0.	0.	31.	0.	0.	0.	0.
AVE	3761.	261.	1117.	719.	0.	0.	0.	326.	0.	0.	0.	0.
TOT	759710.	52712.	225660.	145259.	0.	0.	0.	65915.	0.	0.	0.	0.
SD	13980.	371.	1309.	1434.	0.	0.	0.	386.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL OEM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1363.	59.	4390.	813.	0.	0.	0.	183.	0.	0.	0.	0.
MIN	5.	1.	11.	2.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	129.	7.	360.	67.	0.	0.	0.	17.	0.	0.	0.	0.
TOT	26152.	1445.	72750.	13579.	0.	0.	0.	3339.	0.	0.	0.	0.
SD	208.	9.	644.	120.	0.	0.	0.	26.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 332
TOTAL NUMBER OF MANUFACTURING PLANTS... 223

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4590.	188.	545.	121497.	622.
FLOW (MGY)	1730.	3.	125.	27832.	249.
TOTAL CAPITAL COST	697931.	16809.	109707.	24464640.	103284.
TOTAL ANNUAL OEM COST	90668.	776.	8320.	1855290.	12458.
TOTAL ANNUAL COST	179305.	2911.	22253.	4962381.	25487.

ANNUAL COST OF WASTE TREATMENT

OEM	REPLACEMENT	INTEREST	TOTAL
1855290.	1223231.	1883776.	4962297.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	90668.	58717.	73827.	442964.	11364.	6.
10000. TO 50000.	48778.	10225.	17519.	560605.	7564.	32.
0. TO 10000.	9996.	776.	4604.	851784.	2363.	185.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	872413.	618313.	741825.	5192773.	92744.	7.
100000. TO 500000.	398247.	100430.	166273.	18123776.	64245.	109.
0. TO 100000.	99679.	21011.	67899.	7265176.	18886.	107.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	86.	0.	127.	0.	485.	0.	0.	0.	0.	0.	0.
MIN	0.	1.	0.	0.	0.	16.	0.	0.	0.	0.	0.	0.
AVE	0.	10.	0.	9.	0.	90.	0.	0.	0.	0.	0.	0.
TOT	0.	2243.	0.	2044.	0.	20178.	0.	0.	0.	0.	0.	0.
SD	0.	13.	0.	18.	0.	73.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL OEM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	3.	0.	17.	0.	70.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	0.	1.	0.	6.	0.	0.	0.	0.	0.	0.
TOT	0.	168.	0.	289.	0.	1398.	0.	0.	0.	0.	0.	0.
SD	0.	0.	0.	2.	0.	10.	0.	0.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 3321
TOTAL NUMBER OF MANUFACTURING PLANTS... 117

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4590.	200.	583.	68198.	792.
FLOW (MGY)	1730.	14.	190.	22205.	328.
TOTAL CAPITAL COST	697931.	39397.	143355.	16772554.	128704.
TOTAL ANNUAL OEM COST	90668.	1980.	11779.	1378110.	16166.
TOTAL ANNUAL COST	179305.	6984.	29985.	3508202.	32434.

ANNUAL COST OF WASTE TREATMENT

OEM	REPLACEMENT	INTEREST	TOTAL
1378110.	838628.	1291486.	3508223.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	90668.	58717.	73827.	442964.	11364.	6.
10000. TO 50000.	48778.	10225.	18462.	461556.	8251.	25.
0. TO 10000.	9996.	1980.	5507.	473604.	2267.	86.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	837516.	593580.	712152.	4985062.	89034.	7.
100000. TO 500000.	372717.	113293.	175142.	11734502.	67057.	67.
0. TO 100000.	99261.	47276.	79244.	3407507.	15204.	43.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	86.	0.	127.	0.	485.	0.	0.	0.	0.	0.	0.
MIN	0.	3.	0.	1.	0.	36.	0.	0.	0.	0.	0.	0.
AVE	0.	14.	0.	14.	0.	116.	0.	0.	0.	0.	0.	0.
TOT	0.	1628.	0.	1622.	0.	13523.	0.	0.	0.	0.	0.	0.
SD	0.	16.	0.	24.	0.	89.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL OEM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	3.	0.	17.	0.	70.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	0.	2.	0.	9.	0.	0.	0.	0.	0.	0.
TOT	0.	105.	0.	224.	0.	1049.	0.	0.	0.	0.	0.	0.
SD	0.	1.	0.	3.	0.	13.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 3331
TOTAL NUMBER OF MANUFACTURING PLANTS... 27

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1870.	10.	728.	19654.	637.
FLOW (MGY)	5659.	27.	1808.	48812.	1673.
TOTAL CAPITAL COST	2140719.	56924.	914289.	24685808.	687476.
TOTAL ANNUAL O&M COST	370524.	4012.	140347.	3789375.	116842.
TOTAL ANNUAL COST	633603.	11912.	256462.	6924480.	203279.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
3789375.	1234290.	1900806.	6924471.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	370524.	102360.	221754.	3548057.	77469.	16.
50000. TO 100000.	71257.	71257.	71257.	71257.	0.	1.
10000. TO 50000.	45150.	17759.	28521.	142603.	12806.	5.
0. TO 10000.	8367.	4012.	5492.	27461.	1877.	5.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2782933.	1316745.	1886146.	28292192.	512477.	15.
500000. TO 1000000.	755443.	520611.	664264.	1992793.	125906.	3.
100000. TO 500000.	458130.	130083.	292908.	1464538.	118579.	5.
0. TO 100000.	99002.	74001.	85507.	342028.	10271.	4.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	307.	1174.	685.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	6.	46.	4.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	130.	534.	251.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	3513.	14407.	6766.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	100.	367.	224.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	8.	292.	71.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	1.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	4.	110.	27.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	106.	2966.	717.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	2.	92.	22.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 3332
TOTAL NUMBER OF MANUFACTURING PLANTS... 8

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	520.	55.	267.	2138.	164.
FLOW (MGY)	1317.	83.	669.	5355.	527.
TOTAL CAPITAL COST	711915.	94683.	396612.	3172892.	256898.
TOTAL ANNUAL OEM COST	114209.	7022.	57071.	456569.	43680.
TOTAL ANNUAL COST	204623.	19047.	107441.	859526.	76281.

ANNUAL COST OF WASTE TREATMENT

OEM	REPLACEMENT	INTEREST	TOTAL
456569.	158645.	244313.	859526.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	114209.	102423.	108316.	216633.	8334.	2.
50000. TO 100000.	99775.	58561.	79168.	158336.	29143.	2.
10000. TO 50000.	44700.	14644.	24859.	74578.	17185.	3.
0. TO 10000.	7022.	7022.	7022.	7022.	0.	1.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	925489.	536960.	795149.	3180595.	175744.	4.
100000. TO 500000.	448421.	123088.	236041.	944165.	144770.	4.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	518.	193.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	84.	11.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	301.	95.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	2409.	764.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	180.	77.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL OEM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	92.	22.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	46.	11.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	368.	88.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	35.	9.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 3333
TOTAL NUMBER OF MANUFACTURING PLANTS... 15

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2500.	150.	677.	10150.	683.
FLOW (MGY)	3755.	124.	683.	10240.	928.
TOTAL CAPITAL COST	1567853.	117743.	382256.	5733833.	370716.
TOTAL ANNUAL O&M COST	289312.	11815.	56725.	850878.	70043.
TOTAL ANNUAL COST	492239.	26769.	105272.	1579074.	117014.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
850878.	286692.	441505.	1579073.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	289312.	108883.	199097.	398194.	127583.	2.
50000. TO 100000.	78064.	51963.	67424.	202271.	13702.	3.
10000. TO 50000.	49049.	11815.	25041.	250412.	11100.	10.
0. TO 10000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2077207.	2077207.	2077207.	2077207.	0.	1.
500000. TO 1000000.	845447.	542784.	661959.	2647836.	140091.	4.
100000. TO 500000.	476017.	153069.	272894.	2728939.	96938.	10.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	1035.	563.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	102.	16.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	286.	96.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	4295.	1439.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	234.	138.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	233.	56.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	10.	2.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	46.	11.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	686.	164.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	56.	14.	0.	0.	0.	0.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 3334
TOTAL NUMBER OF MANUFACTURING PLANTS... 21

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3500.	784.	1598.	33558.	787.
FLOW (MGY)	11000.	915.	3980.	83586.	2734.
TOTAL CAPITAL COST	19308032.	1866862.	6994469.	146883856.	4665315.
TOTAL ANNUAL O&M COST	469437.	59054.	191261.	4016477.	123130.
TOTAL ANNUAL COST	2921555.	296145.	1079557.	22670704.	714705.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4016477.	7344192.	11310051.	22670720.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	469437.	130787.	251807.	3525295.	106965.	14.
50000. TO 100000.	84839.	59054.	70169.	491184.	9290.	7.
10000. TO 50000.	0.	0.	0.	0.	0.	0.
0. TO 10000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	25100416.	6221202.	12504318.	162556144.	5281020.	13.
1000000. TO 5000000.	4625445.	2426919.	3549098.	28392784.	739912.	8.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	1419.	941.	0.	0.	0.	0.	0.	16948.	0.	0.
MIN	0.	0.	312.	85.	0.	0.	0.	0.	0.	1470.	0.	0.
AVE	0.	0.	692.	335.	0.	0.	0.	0.	0.	5967.	0.	0.
TOT	0.	0.	14531.	7038.	0.	0.	0.	0.	0.	125315.	0.	0.
SD	0.	0.	309.	229.	0.	0.	0.	0.	0.	4130.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	361.	88.	0.	0.	0.	0.	0.	21.	0.	0.
MIN	0.	0.	45.	11.	0.	0.	0.	0.	0.	4.	0.	0.
AVE	0.	0.	146.	35.	0.	0.	0.	0.	0.	9.	0.	0.
TOT	0.	0.	3075.	744.	0.	0.	0.	0.	0.	197.	0.	0.
SD	0.	0.	95.	23.	0.	0.	0.	0.	0.	5.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 34
TOTAL NUMBER OF MANUFACTURING PLANTS... 1037

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	14000.	54.	565.	586016.	875.
FLOW (MGY)	1935.	2.	106.	110071.	165.
TOTAL CAPITAL COST	1053750.	11417.	119714.	124143440.	102174.
TOTAL ANNUAL O&M COST	186429.	650.	12127.	12575899.	15342.
TOTAL ANNUAL COST	320256.	2154.	27329.	28339776.	28216.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
12575899.	6207171.	9559040.	28342096.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	186429.	106163.	136663.	956638.	28348.	7.
50000. TO 100000.	99522.	51735.	68984.	1241718.	15596.	18.
10000. TO 50000.	49789.	10013.	17202.	7138814.	8010.	415.
0. TO 10000.	9992.	650.	5425.	3238817.	2617.	597.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1317187.	1079237.	1167406.	5837030.	113578.	5.
500000. TO 1000000.	880682.	501505.	638542.	12770840.	127298.	20.
100000. TO 500000.	480208.	100083.	174941.	113186816.	71247.	647.
0. TO 100000.	99947.	14272.	64078.	23388432.	24439.	365.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	102.	626.	308.	0.	0.	0.	0.	18.	0.	0.	0.
MIN	0.	1.	1[illegible].	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	10.	90.	17.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	10590.	93534.	17701.	0.	0.	0.	0.	2.	0.	0.	0.
SD	0.	10.	65.	26.	0.	0.	0.	0.	2317.	0.	0.	0.
									2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4.	136.	38.	0.	0.	0.	0.	9.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	9.	2.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	795.	8834.	2385.	0.	0.	0.	0.	1.	0.	0.	0.
SD	0.	0.	11.	3.	0.	0.	0.	0.	561.	0.	0.	0.
									1.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 35
TOTAL NUMBER OF MANUFACTURING PLANTS... 790

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36000.	9.	1260.	995341.	2275.
FLOW (MGY)	4290.	0.	126.	99226.	269.
TOTAL CAPITAL COST	1876150.	1721.	126663.	100063616.	146762.
TOTAL ANNUAL O&M COST	334738.	20.	13497.	10662950.	22174.
TOTAL ANNUAL COST	573009.	238.	29582.	23369968.	40698.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
10662950.	5003180.	7704894.	23371024.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	334738.	102463.	177506.	1242542.	85071.	7.
50000. TO 100000.	95560.	50568.	70901.	1559830.	14396.	22.
10000. TO 50000.	49573.	10004.	20623.	5362020.	10187.	260.
0. TO 10000.	9988.	20.	4987.	2498663.	2469.	501.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2345187.	1083486.	1617760.	8088801.	638285.	5.
500000. TO 1000000.	988624.	524762.	719462.	13669769.	128678.	19.
100000. TO 500000.	493675.	100118.	199275.	80108448.	98156.	402.
0. TO 100000.	99465.	2152.	63780.	23215936.	23920.	364.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	180.	1008.	660.	0.	0.	0.	0.	29.	0.	0.	0.
MIN	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	11.	93.	20.	0.	0.	0.	0.	2.	0.	0.	0.
TOT	0.	8653.	73724.	15837.	0.	0.	0.	0.	1849.	0.	0.	0.
SD	0.	14.	89.	43.	0.	0.	0.	0.	3.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	5.	244.	69.	0.	0.	0.	0.	16.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	10.	3.	0.	0.	0.	0.	1.	0.	0.	0.
TOT	0.	614.	7524.	2044.	0.	0.	0.	0.	481.	0.	0.	0.
SD	0.	0.	16.	5.	0.	0.	0.	0.	1.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 36
TOTAL NUMBER OF MANUFACTURING PLANTS... 817

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	22800.	60.	1535.	1254103.	2272.
FLOW (MGY)	8289.	8.	171.	139439.	443.
TOTAL CAPITAL COST	3050801.	26463.	158462.	129463712.	191583.
TOTAL ANNUAL O&M COST	626570.	1555.	17272.	14111244.	35248.
TOTAL ANNUAL COST	1014022.	5054.	37394.	30550960.	59332.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
14111244.	6473185.	9968700.	30553104.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	626570.	513217.	569893.	1139786.	80160.	2.
100000. TO 500000.	235226.	100996.	155633.	1867598.	50089.	12.
50000. TO 100000.	85782.	50287.	63532.	1524778.	11586.	24.
10000. TO 50000.	49243.	10001.	19424.	6973126.	9166.	359.
0. TO 10000.	9877.	1555.	6205.	2606037.	2040.	420.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3813501.	1040946.	1781643.	17816432.	944149.	10.
500000. TO 1000000.	930594.	502061.	648057.	18145600.	127731.	28.
100000. TO 500000.	497958.	100345.	194124.	109485840.	87773.	564.
0. TO 100000.	99972.	33078.	76207.	16384579.	15857.	215.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	286.	1490.	1230.	0.	0.	0.	0.	44.	0.	0.	0.
MIN	0.	2.	23.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	14.	115.	27.	0.	0.	0.	0.	3.	0.	0.	0.
TOT	0.	11355.	93626.	22102.	0.	0.	0.	0.	2379.	0.	0.	0.
SD	0.	18.	106.	67.	0.	0.	0.	0.	3.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	8.	458.	129.	0.	0.	0.	0.	30.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	12.	3.	0.	0.	0.	0.	1.	0.	0.	0.
TOT	0.	709.	10022.	2736.	0.	0.	0.	0.	644.	0.	0.	0.
SD	0.	1.	26.	7.	0.	0.	0.	0.	2.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 37
TOTAL NUMBER OF MANUFACTURING PLANTS... 562

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	38000.	150.	1923.	1080478.	3843.
FLOW (MGY)	5935.	4.	284.	159497.	602.
TOTAL CAPITAL COST	2469636.	16197.	218348.	122711824.	288497.
TOTAL ANNUAL O&M COST	505230.	897.	28293.	15900577.	50452.
TOTAL ANNUAL COST	818912.	2954.	56019.	31482912.	86884.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
15900577.	6135590.	9448805.	31484960.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	505230.	505230.	505230.	505230.	0.	1.
100000. TO 500000.	362315.	103105.	189259.	5677772.	76626.	30.
50000. TO 100000.	94801.	51571.	70409.	3097985.	12798.	44.
10000. TO 50000.	49535.	10035.	21887.	5296564.	10778.	242.
0. TO 10000.	9959.	897.	5400.	1323120.	2634.	245.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3087420.	1077363.	1711041.	37642912.	562685.	22.
500000. TO 1000000.	984276.	516459.	685938.	34296880.	124418.	50.
100000. TO 500000.	494549.	100153.	213169.	72051024.	101547.	338.
0. TO 100000.	99510.	20246.	61851.	9401318.	21714.	152.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	235.	1267.	931.	0.	0.	0.	0.	37.	0.	0.	0.
MIN	0.	1.	14.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	20.	149.	46.	0.	0.	0.	0.	4.	0.	0.	0.
TOT	0.	11124.	83800.	25585.	0.	0.	0.	0.	2201.	0.	0.	0.
SD	0.	28.	162.	96.	0.	0.	0.	0.	5.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	7.	369.	104.	0.	0.	0.	0.	25.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	20.	6.	0.	0.	0.	0.	1.	0.	0.	0.
TOT	0.	615.	11400.	3146.	0.	0.	0.	0.	740.	0.	0.	0.
SD	0.	1.	37.	10.	0.	0.	0.	0.	2.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 20
TOTAL NUMBER OF MANUFACTURING PLANTS... 6984

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5900.	3.	206.	924049.	329.
FLOW (MGY)	65899.	1.	133.	908750.	1089.
TOTAL CAPITAL COST	33487040.	16860.	177026.	795553024.	635927.
TOTAL ANNUAL O&M COST	2604477.	669.	9685.	43524176.	47299.
TOTAL ANNUAL COST	6857330.	2874.	32172.	144581632.	127795.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
43524176.	35777648.	61257552.	144559376.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2604477.	506198.	1014164.	5070822.	894707.	5.
100000. TO 500000.	477969.	104808.	190795.	5914658.	95287.	31.
50000. TO 100000.	99285.	50685.	69055.	4695709.	13944.	68.
10000. TO 50000.	49605.	10042.	18978.	13569323.	8943.	715.
0. TO 10000.	9997.	669.	3888.	14287711.	2290.	3675.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	41858800.	5150211.	11674731.	116747312.	10934836.	10.
1000000. TO 5000000.	4775635.	1001477.	1809349.	184553248.	833606.	102.
500000. TO 1000000.	999554.	500238.	693267.	131027520.	149119.	189.
100000. TO 500000.	497771.	100058.	207386.	428873472.	97242.	2068.
0. TO 100000.	99968.	21075.	62811.	133472464.	20846.	2125.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	3469.	237.	17450.	66.	7299.	0.	5269.	28.	0.	0.	0.
MIN	0.	0.	0.	0.	8.	0.	0.	5.	1.	0.	0.	0.
AVE	0.	19.	29.	92.	16.	128.	0.	67.	4.	0.	0.	0.
TOT	0.	49378.	34851.	66999.	11789.	330800.	0.	298940.	2837.	0.	0.	0.
SD	0.	88.	19.	707.	8.	241.	0.	127.	3.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	42.	24.	574.	49.	1717.	0.	271.	10.	0.	0.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	2.	5.	4.	9.	0.	2.	1.	0.	0.	0.
TOT	0.	1912.	1872.	3434.	3169.	22874.	0.	9738.	528.	0.	0.	0.
SD	0.	1.	2.	24.	6.	47.	0.	5.	1.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 22
TOTAL NUMBER OF MANUFACTURING PLANTS... 1021

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	9000.	35.	537.	548467.	602.
FLOW (MGY)	2422.	10.	161.	163932.	197.
TOTAL CAPITAL COST	1307587.	41569.	208169.	212540064.	143954.
TOTAL ANNUAL O&M COST	79356.	1493.	8916.	9103227.	7420.
TOTAL ANNUAL COST	238569.	6998.	35349.	36091776.	25330.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
9103227.	10627002.	16365576.	36095792.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	79356.	51924.	65334.	261336.	13384.	4.
10000. TO 50000.	49752.	10076.	16693.	4707309.	7213.	282.
0. TO 10000.	9996.	1493.	5625.	4134649.	2110.	735.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1634483.	1007220.	1223106.	12231065.	225188.	10.
500000. TO 1000000.	960954.	502827.	654544.	43199936.	125129.	66.
100000. TO 500000.	497712.	100258.	237089.	202948176.	101009.	856.
0. TO 100000.	99842.	51962.	82004.	7298334.	13075.	89.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	41.	196.	165.	0.	656.	0.	501.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	2?.	0.	12.	0.	0.	0.	0.
AVE	0.	5.	34.	8.	0.	119.	0.	73.	0.	0.	0.	0.
TOT	0.	2862.	19110.	7038.	0.	108970.	0.	74593.	0.	0.	0.	0.
SD	0.	5.	27.	13.	0.	82.	0.	56.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	1.	12.	7.	0.	59.	0.	14.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	2.	1.	0.	6.	0.	2.	0.	0.	0.	0.
TOT	0.	241.	843.	593.	0.	5339.	0.	2087.	0.	0.	0.	0.
SD	0.	0.	2.	1.	0.	6.	0.	1.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 24
TOTAL NUMBER OF MANUFACTURING PLANTS... 405

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	14500.	75.	369.	149384.	774.
FLOW (MGY)	7138.	28.	221.	89627.	409.
TOTAL CAPITAL COST	2908433.	80532.	285855.	115771376.	212153.
TOTAL ANNUAL OGM COST	235249.	2150.	13116.	5312013.	15214.
TOTAL ANNUAL COST	604620.	12530.	49419.	20014656.	41995.

ANNUAL COST OF WASTE TREATMENT

OGM	REPLACEMENT	INTEREST	TOTAL
5312013.	5788568.	8914391.	20014960.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	235249.	235249.	235249.	235249.	0.	1.
50000. TO 100000.	82770.	50092.	61082.	488658.	11675.	8.
10000. TO 50000.	48079.	10020.	17091.	3195966.	8079.	187.
0. TO 10000.	9970.	2150.	6661.	1392194.	2201.	209.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3635541.	1039375.	1478944.	14789440.	787362.	10.
500000. TO 1000000.	983634.	506791.	673431.	31651248.	130145.	47.
100000. TO 500000.	496428.	100665.	282397.	98274160.	90217.	348.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	752.	0.	1084.	0.	1073.	0.	0.	0.	0.
MIN	0.	0.	0.	3.	0.	48.	0.	29.	0.	0.	0.	0.
AVE	0.	0.	0.	26.	0.	150.	0.	110.	0.	0.	0.	0.
TOT	0.	0.	0.	10476.	0.	60853.	0.	44441.	0.	0.	0.	0.
SD	0.	0.	0.	45.	0.	89.	0.	81.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL OGM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	49.	0.	145.	0.	41.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	2.	0.	8.	0.	3.	0.	0.	0.	0.
TOT	0.	0.	0.	858.	0.	3197.	0.	1257.	0.	0.	0.	0.
SD	0.	0.	0.	3.	0.	9.	0.	3.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 26
TOTAL NUMBER OF MANUFACTURING PLANTS... 862

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4000.	12.	447.	385511.	540.
FLOW (MGY)	42476.	8.	2018.	1739092.	4397.
TOTAL CAPITAL COST	23681296.	25804.	1264778.	1090238720.	2549735.
TOTAL ANNUAL C&M COST	1668232.	898.	88171.	76003344.	179163.
TOTAL ANNUAL COST	4513334.	4190.	248813.	214477232.	500326.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
76003344.	54511920.	83948336.	214463600.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1668232.	503414.	875968.	25403072.	327868.	29.
100000. TO 500000.	468983.	100503.	207847.	32216304.	96611.	155.
50000. TO 100000.	99802.	50052.	71042.	9448607.	13927.	133.
10000. TO 50000.	49615.	10092.	26881.	7634172.	11919.	284.
0. TO 10000.	9989.	898.	5007.	1306928.	2352.	261.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	29601616.	5027460.	11773966.	612246272.	6622633.	52.
1000000. TO 5000000.	4676807.	1008279.	2026616.	555292928.	886911.	274.
500000. TO 1000000.	993066.	507297.	757838.	129590352.	138180.	171.
100000. TO 500000.	495417.	100205.	219937.	57843376.	106482.	263.
0. TO 100000.	99799.	32254.	77796.	7935221.	16501.	102.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	7536.	0.	3256.	0.	4557.	0.	0.	8508.	0.
MIN	0.	0.	0.	1.	0.	25.	0.	12.	0.	0.	2110.	0.
AVE	0.	0.	0.	316.	0.	460.	0.	464.	0.	0.	4222.	0.
TOT	0.	0.	0.	211362.	0.	396333.	0.	326324.	0.	0.	156217.	0.
SD	0.	0.	0.	830.	0.	485.	0.	600.	0.	0.	1831.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	248.	0.	740.	0.	185.	0.	0.	851.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	189.	0.
AVE	0.	0.	0.	16.	0.	47.	0.	15.	0.	0.	403.	0.
TOT	0.	0.	0.	10432.	0.	40257.	0.	10411.	0.	0.	14904.	0.
SD	0.	0.	0.	28.	0.	68.	0.	22.	0.	0.	178.	0.

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* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 28
TOTAL NUMBER OF MANUFACTURING PLANTS... 1421

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28600.	25.	550.	781889.	1398.
FLOW (MGY)	33247.	5.	501.	712005.	1773.
TOTAL CAPITAL COST	17935904.	8881.	418287.	594385408.	911054.
TOTAL ANNUAL OEM COST	1607101.	814.	32154.	45690176.	78201.
TOTAL ANNUAL COST	3884960.	1947.	85286.	121191344.	189973.

ANNUAL COST OF WASTE TREATMENT

OEM	REPLACEMENT	INTEREST	TOTAL
45690176.	29719264.	45767648.	121177088.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1607101.	555965.	951666.	5709993.	393379.	6.
100000. TO 500000.	437354.	100740.	177063.	13102692.	90414.	74.
50000. TO 100000.	99175.	50005.	69870.	7825483.	14100.	112.
10000. TO 50000.	49969.	10021.	22435.	16130419.	10443.	719.
0. TO 10000.	9991.	814.	5744.	2929415.	2466.	510.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	22419872.	5167943.	11409926.	91279408.	6866914.	8.
1000000. TO 5000000.	4805508.	1004459.	1923063.	296151808.	906083.	154.
500000. TO 1000000.	976905.	500719.	684558.	154025600.	139152.	225.
100000. TO 500000.	495571.	100410.	234137.	188011792.	107893.	803.
0. TO 100000.	99693.	11101.	59092.	13650331.	31506.	231.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	7172.	861.	2374.	3400.	276.	2755.	73.	3870.	28.	0.	0.	0.
MIN	0.	2.	21.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	91.	28.	157.	52.	27.	284.	34.	188.	7.	0.	0.	0.
TOT	35309.	33433.	191322.	73295.	16483.	86584.	3612.	153800.	634.	0.	0.	0.
SD	532.	59.	180.	175.	26.	271.	7.	297.	5.	0.	0.	0.

DISTRIBUTION OF ANNUAL OEM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	213.	14.	672.	166.	577.	288.	11.	202.	10.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	7.	1.	16.	4.	15.	15.	2.	5.	1.	0.	0.	0.
TOT	2564.	1106.	19083.	4981.	9093.	4523.	193.	4015.	137.	0.	0.	0.
SD	17.	1.	36.	9.	38.	23.	1.	11.	2.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 29
TOTAL NUMBER OF MANUFACTURING PLANTS... 334

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10000.	27.	381.	127318.	876.
FLOW (MGY)	23582.	4.	727.	242940.	2045.
TOTAL CAPITAL COST	64726384.	26943.	1937008.	646960896.	5081015.
TOTAL ANNUAL OGM COST	1870653.	1645.	93975.	31387696.	184368.
TOTAL ANNUAL COST	10090902.	5067.	339986.	113551408.	825144.

ANNUAL COST OF WASTE TREATMENT

OGM	REPLACEMENT	INTEREST	TOTAL
31387696.	32348032.	49815952.	113551680.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1870653.	518860.	882280.	10587359.	367879.	12.
100000. TO 500000.	466652.	101192.	188046.	13163185.	89851.	70.
50000. TO 100000.	99001.	51997.	70923.	4113560.	14261.	58.
10000. TO 50000.	49009.	10208.	27786.	3112062.	11526.	112.
0. TO 10000.	9751.	1649.	5038.	413114.	2120.	82.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	80907968.	5063841.	15325547.	475091968.	15646569.	31.
1000000. TO 5000000.	4895670.	1013414.	2214318.	272361216.	1016324.	123.
500000. TO 1000000.	991593.	503399.	725825.	43549488.	144238.	60.
100000. TO 500000.	493878.	101174.	227315.	13638898.	125141.	60.
0. TO 100000.	96949.	33679.	68310.	4098600.	17132.	60.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	35206.	412.	2288.	1021.	31.	0.	0.	186.	0.	0.	0.	25800.
MIN	5.	0.	10.	0.	0.	0.	0.	0.	0.	0.	0.	150.
AVE	420.	23.	183.	32.	0.	0.	0.	31.	0.	0.	0.	1832.
TOT	140413.	7724.	60973.	10673.	878.	0.	0.	3198.	0.	0.	0.	423120.
SD	2334.	47.	254.	88.	4.	0.	0.	24.	0.	0.	0.	2914.

DISTRIBUTION OF ANNUAL OGM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	472.	7.	467.	61.	17.	0.	0.	7.	0.	0.	0.	864.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.
AVE	23.	1.	19.	2.	2.	0.	0.	1.	0.	0.	0.	69.
TOT	7584.	305.	6460.	824.	202.	0.	0.	140.	0.	0.	0.	15873.
SD	46.	1.	43.	6.	2.	0.	0.	1.	0.	0.	0.	100.

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* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 30
TOTAL NUMBER OF MANUFACTURING PLANTS... 459

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20000.	45.	663.	304302.	1295.
FLOW (MGY)	7465.	3.	71.	32459.	155.
TOTAL CAPITAL COST	1551630.	21613.	142938.	65608752.	120868.
TOTAL ANNUAL OEM COST	162194.	915.	8102.	3718853.	11085.
TOTAL ANNUAL COST	359250.	3660.	26256.	12051546.	26299.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
3718853.	3280437.	5051871.	12051161.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	162194.	162194.	162194.	162194.	0.	1.
50000. TO 100000.	87643.	50261.	69478.	347391.	16985.	5.
10000. TO 50000.	40745.	10075.	16627.	1213798.	6304.	73.
0. TO 10000.	9975.	915.	5252.	1995583.	1854.	380.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1939537.	1030465.	1334245.	5336981.	410141.	4.
500000. TO 1000000.	791624.	511826.	628217.	9025734.	103392.	8.
100000. TO 500000.	492736.	100218.	178964.	64785008.	79988.	362.
0. TO 100000.	99306.	27016.	80760.	6864958.	14366.	85.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	112.	235.	180.	0.	550.	0.	435.	0.	0.	0.	0.
MIN	0.	1.	4.	0.	0.	12.	0.	5.	0.	0.	0.	0.
AVE	0.	7.	24.	5.	0.	70.	0.	38.	0.	0.	0.	0.
TOT	0.	3141.	10823.	2429.	0.	31968.	0.	17248.	0.	0.	0.	0.
SD	0.	8.	19.	11.	0.	49.	0.	34.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL OEM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4.	31.	21.	0.	87.	0.	20.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	1.	1.	0.	4.	0.	2.	0.	0.	0.	0.
TOT	0.	285.	545.	353.	0.	1796.	0.	740.	0.	0.	0.	0.
SD	0.	0.	2.	1.	0.	6.	0.	1.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 31
TOTAL NUMBER OF MANUFACTURING PLANTS... 215

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3700.	60.	476.	102307.	504.
FLOW (MGY)	6349.	6.	237.	51027.	505.
TOTAL CAPITAL COST	2593192.	12165.	402392.	86514336.	465301.
TOTAL ANNUAL O&M COST	214222.	1061.	19960.	4291402.	26325.
TOTAL ANNUAL COST	456758.	2606.	71065.	15278901.	82444.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4291402.	4325716.	6661600.	15278718.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	214222.	114131.	150792.	603166.	43870.	4.
50000. TO 100000.	94026.	50403.	67584.	1013757.	12944.	15.
10000. TO 50000.	46835.	10076.	22612.	2444260.	9693.	108.
0. TO 10000.	9739.	1061.	2617.	230268.	2152.	88.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3191490.	1012275.	1525676.	54924336.	580238.	36.
500000. TO 1000000.	965067.	517147.	693436.	36058672.	126243.	52.
100000. TO 500000.	494153.	109181.	314806.	14795888.	119670.	47.
0. TO 100000.	61739.	15206.	29569.	2365488.	9246.	80.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	279.	1057.	609.	99.	0.	0.	720.	0.	0.	0.	0.
MIN	0.	27.	127.	21.	0.	0.	0.	8.	0.	0.	0.	0.
AVE	0.	74.	344.	114.	14.	0.	0.	123.	0.	0.	0.	0.
TOT	0.	8192.	37789.	12576.	1431.	0.	0.	26524.	0.	0.	0.	0.
SD	0.	50.	185.	108.	14.	0.	0.	121.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4.	101.	24.	175.	0.	0.	39.	0.	0.	0.	0.
MIN	0.	1.	5.	1.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	21.	5.	7.	0.	0.	3.	0.	0.	0.	0.
TOT	0.	160.	2259.	534.	721.	0.	0.	618.	0.	0.	0.	0.
SD	0.	1.	18.	4.	19.	0.	0.	3.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 32
TOTAL NUMBER OF MANUFACTURING PLANTS... 945

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	8000.	50.	345.	325708.	586.
FLOW (MGY)	4834.	5.	159.	150009.	377.
TOTAL CAPITAL COST	1857306.	17466.	141170.	133405840.	172122.
TOTAL ANNUAL O&M COST	407209.	606.	14866.	14047921.	28397.
TOTAL ANNUAL COST	643087.	2834.	32793.	30988944.	49988.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
14047921.	6670291.	10272244.	30990448.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	407209.	105230.	178239.	3208293.	76054.	18.
50000. TO 100000.	99137.	50370.	74524.	1863094.	15761.	25.
10000. TO 50000.	49265.	10012.	18010.	6267449.	8498.	348.
0. TO 10000.	9975.	606.	4890.	2709197.	2666.	554.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2321632.	1004449.	1388263.	23600480.	409275.	17.
500000. TO 1000000.	975724.	505899.	707045.	19090224.	147425.	27.
100000. TO 500000.	492533.	100019.	181092.	103403600.	77352.	571.
0. TO 100000.	99243.	21833.	62627.	20666768.	24022.	330.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	1165.	692.	0.	256.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	17.	1.	0.	13.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	108.	23.	0.	52.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	102335.	21429.	0.	9641.	0.	0.	0.	0.	0.	0.
SD	0.	0.	114.	54.	0.	44.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	328.	80.	0.	31.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	12.	3.	0.	3.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	10962.	2576.	0.	509.	0.	0.	0.	0.	0.	0.
SD	0.	0.	23.	5.	0.	4.	0.	0.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 33
TOTAL NUMBER OF MANUFACTURING PLANTS... 1137

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28000.	10.	902.	1025720.	2033.
FLOW (MGY)	44500.	3.	893.	1015870.	3258.
TOTAL CAPITAL COST	38536096.	16809.	707669.	804620032.	2475715.
TOTAL ANNUAL OEM COST	3101819.	776.	78191.	88903088.	259339.
TOTAL ANNUAL COST	7995902.	2911.	168080.	191107072.	567618.

ANNUAL COST OF WASTE TREATMENT

OEM	REPLACEMENT	INTEREST	TOTAL
88903088.	40230992.	61955712.	191089792.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3101819.	511689.	1172829.	49258848.	680124.	42.
100000. TO 500000.	491766.	100659.	200652.	24680240.	91280.	123.
50000. TO 100000.	98859.	50490.	73864.	6278418.	14421.	85.
10000. TO 50000.	49565.	10046.	21950.	5816627.	11000.	265.
0. TO 10000.	9971.	776.	4625.	2876732.	2262.	622.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	48170112.	5028106.	12564288.	552828672.	9755290.	44.
1000000. TO 5000000.	4777005.	1002785.	2077873.	255578416.	1001454.	123.
500000. TO 1000000.	987378.	503251.	714272.	72855744.	153819.	102.
100000. TO 500000.	498154.	100240.	200701.	98945376.	97900.	493.
0. TO 100000.	99606.	21011.	68605.	25727040.	18784.	375.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	27284.	1209.	4450.	4282.	0.	741.	0.	1310.	0.	8653.	0.	0.
MIN	6.	1.	14.	0.	0.	0.	0.	31.	0.	0.	0.	0.
AVE	708.	43.	272.	93.	0.	59.	0.	232.	0.	3427.	0.	0.
TOT	242996.	46503.	248272.	105672.	0.	42372.	0.	46947.	0.	71963.	0.	0.
SD	2604.	115.	498.	333.	0.	57.	0.	244.	0.	2023.	0.	0.

DISTRIBUTION OF ANNUAL OEM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	654.	30.	1970.	367.	0.	127.	0.	81.	0.	12.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	49.	2.	60.	10.	0.	3.	0.	11.	0.	6.	0.	0.
TOT	16905.	1728.	54613.	10962.	0.	2439.	0.	2125.	0.	130.	0.	0.
SD	96.	3.	179.	31.	0.	7.	0.	14.	0.	3.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 34
TOTAL NUMBER OF MANUFACTURING PLANTS... 1037

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	14000.	54.	565.	586016.	875.
FLOW (MGY)	1896.	2.	68.	70014.	121.
TOTAL CAPITAL COST	1037925.	11417.	88260.	91525712.	80251.
TOTAL ANNUAL OEM COST	183095.	616.	8272.	8577829.	11865.
TOTAL ANNUAL COST	314911.	2154.	19480.	20200800.	21956.

ANNUAL COST OF WASTE TREATMENT

OEM	REPLACEMENT	INTEREST	TOTAL
8577829.	4576285.	7047476.	20201584.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	183095.	138795.	160945.	321890.	31325.	2.
50000. TO 100000.	97980.	54336.	75590.	907079.	15322.	12.
10000. TO 50000.	48629.	10027.	16809.	3227352.	8334.	192.
0. TO 10000.	9993.	616.	4960.	4121588.	2439.	831.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1297405.	1036676.	1167040.	2334081.	184363.	2.
500000. TO 1000000.	878323.	511815.	666825.	8001903.	116073.	12.
100000. TO 500000.	453216.	100077.	153282.	66524512.	65657.	434.
0. TO 100000.	99939.	14272.	63753.	37550272.	24320.	589.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	100.	618.	302.	0.	0.	0.	0.	18.	0.	0.	0.
MIN	0.	1.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	7.	68.	11.	0.	0.	0.	0.	2.	0.	0.	0.
TOT	0.	7527.	70897.	11392.	0.	0.	0.	0.	1709.	0.	0.	0.
SD	0.	8.	52.	19.	0.	0.	0.	0.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL OEM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4.	133.	37.	0.	0.	0.	0.	9.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	6.	2.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	671.	5943.	1590.	0.	0.	0.	0.	374.	0.	0.	0.
SD	0.	0.	9.	2.	0.	0.	0.	0.	1.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 35
TOTAL NUMBER OF MANUFACTURING PLANTS... 790

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36000.	9.	1260.	995341.	2275.
FLOW (MGY)	2199.	0.	66.	52449.	139.
TOTAL CAPITAL COST	1287222.	1721.	83794.	66197040.	90670.
TOTAL ANNUAL O&M COST	169721.	20.	7887.	6230688.	12274.
TOTAL ANNUAL COST	333198.	238.	18530.	14638389.	23727.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
6230688.	3309851.	5097169.	14637708.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	169721.	109781.	127769.	511074.	28377.	4.
50000. TO 100000.	97056.	53834.	65938.	395625.	15722.	6.
10000. TO 50000.	48824.	10039.	18354.	2734711.	7793.	149.
0. TO 10000.	9877.	20.	4104.	2589368.	2245.	631.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1609027.	1042495.	1325760.	2651521.	400601.	2.
500000. TO 1000000.	924356.	511536.	662953.	5966580.	175871.	9.
100000. TO 500000.	478690.	100066.	177545.	43143552.	71146.	243.
0. TO 100000.	99835.	2152.	57813.	30987920.	21499.	536.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	124.	753.	389.	0.	0.	0.	0.	21.	0.	0.	0.
MIN	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	7.	65.	11.	0.	0.	0.	0.	2.	0.	0.	0.
TOT	0.	5451.	51031.	8484.	0.	0.	0.	0.	1231.	0.	0.	0.
SD	0.	9.	59.	23.	0.	0.	0.	0.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	3.	123.	35.	0.	0.	0.	0.	8.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	491.	4313.	1155.	0.	0.	0.	0.	272.	0.	0.	0.
SD	0.	0.	9.	2.	0.	0.	0.	0.	1.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 36
TOTAL NUMBER OF MANUFACTURING PLANTS... 817

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	22800.	60.	1535.	1254103.	2272.
FLOW (MGY)	3441.	8.	111.	90909.	208.
TOTAL CAPITAL COST	1544784.	23968.	123441.	100851296.	115857.
TOTAL ANNUAL O&M COST	285926.	1464.	12221.	9984454.	18308.
TOTAL ANNUAL COST	482114.	4508.	27897.	22791552.	32850.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
9984454.	5042564.	7765545.	22792560.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	285926.	100382.	160223.	961336.	79353.	6.
50000. TO 100000.	99984.	54078.	73381.	1100718.	14505.	15.
10000. TO 50000.	49924.	10103.	18218.	4809531.	8322.	264.
0. TO 10000.	9964.	1464.	5851.	1112939.	2059.	532.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1930980.	1630806.	1780893.	3561786.	212252.	2.
500000. TO 1000000.	927197.	533424.	706750.	14841743.	133203.	21.
100000. TO 500000.	497958.	100122.	174719.	84738720.	75417.	485.
0. TO 100000.	99937.	29960.	74189.	22924528.	15856.	309.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	149.	854.	517.	0.	0.	0.	0.	25.	0.	0.	0.
MIN	0.	2.	21.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	11.	93.	18.	0.	0.	0.	0.	2.	0.	0.	0.
TOT	0.	8617.	75670.	14686.	0.	0.	0.	0.	1878.	0.	0.	0.
SD	0.	11.	72.	32.	0.	0.	0.	0.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	5.	208.	59.	0.	0.	0.	0.	14.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	9.	2.	0.	0.	0.	0.	1.	0.	0.	0.
TOT	0.	618.	7021.	1898.	0.	0.	0.	0.	447.	0.	0.	0.
SD	0.	0.	13.	4.	0.	0.	0.	0.	1.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 37
TOTAL NUMBER OF MANUFACTURING PLANTS... 562

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	38000.	150.	1923.	1080478.	3843.
FLOW (MGY)	1075.	2.	69.	38761.	117.
TOTAL CAPITAL COST	684366.	10959.	86468.	48594768.	86873.
TOTAL ANNUAL O&M COST	110910.	660.	8482.	4766777.	11857.
TOTAL ANNUAL COST	197824.	2052.	19464.	10938714.	22821.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4766777.	2429738.	3741795.	10938310.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	110910.	110910.	110910.	110910.	0.	1.
50000. TO 100000.	77642.	50084.	63698.	636978.	8405.	10.
10000. TO 50000.	49539.	10117.	20938.	2219415.	9716.	106.
0. TO 10000.	9689.	660.	4044.	1799562.	2197.	445.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	855457.	524259.	648319.	5834875.	102208.	9.
100000. TO 500000.	482489.	100145.	194547.	33072992.	92909.	170.
0. TO 100000.	99403.	13699.	57019.	21838096.	21490.	383.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	66.	434.	173.	0.	0.	0.	0.	12.	0.	0.	0.
MIN	0.	1.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	7.	66.	11.	0.	0.	0.	0.	2.	0.	0.	0.
TOT	0.	4024.	37357.	6309.	0.	0.	0.	0.	905.	0.	0.	0.
SD	0.	8.	58.	19.	0.	0.	0.	0.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	3.	80.	22.	0.	0.	0.	0.	5.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	6.	2.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	365.	3306.	887.	0.	0.	0.	0.	209.	0.	0.	0.
SD	0.	0.	9.	2.	0.	0.	0.	0.	1.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

STC CODE... 28
TOTAL NUMBER OF MANUFACTURING PLANTS... 4494

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5500.	3.	206.	924045.	329.
FLOW (MGY)	81468.	1.	166.	743829.	1340.
TOTAL CAPITAL COST	39821440.	16860.	203229.	913309952.	790811.
TOTAL ANNUAL OEM COST	3129120.	669.	11469.	51541728.	56757.
TOTAL ANNUAL COST	8182441.	2674.	37284.	167556176.	151889.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
51541728.	45665488.	70324816.	167532032.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3125120.	560409.	1094480.	6566880.	1004518.	6.
100000. TO 500000.	459345.	102396.	185552.	8535399.	92614.	46.
50000. TO 100000.	98652.	50250.	68725.	5566758.	13625.	81.
10000. TO 50000.	49440.	10009.	18938.	16760052.	9044.	885.
0. TO 10000.	9997.	669.	4065.	14128406.	2306.	3476.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	49776800.	5109412.	11319332.	158470656.	11504767.	14.
1000000. TO 5000000.	4843651.	1005192.	1798032.	230148208.	769383.	128.
500000. TO 1000000.	992309.	500594.	679788.	160429872.	147840.	236.
100000. TO 500000.	499856.	100093.	209840.	473608448.	99400.	2257.
0. TO 100000.	99979.	21075.	64120.	119199648.	21151.	1859.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4064.	237.	21509.	76.	8209.	0.	6039.	35.	0.	0.	0.
MIN	0.	0.	0.	0.	8.	0.	0.	5.	1.	0.	0.	0.
AVE	0.	23.	32.	116.	18.	144.	0.	76.	5.	0.	0.	0.
TOT	0.	58783.	37640.	84014.	13167.	372826.	0.	343454.	3349.	0.	0.	0.
SD	0.	103.	21.	871.	9.	273.	0.	147.	4.	0.	0.	0.

DISTRIBUTION OF ANNUAL OEM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	50.	29.	695.	64.	2045.	0.	335.	13.	0.	0.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	2.	6.	5.	11.	0.	2.	1.	0.	0.	0.
TOT	0.	2103.	2107.	4223.	3899.	27451.	0.	11099.	663.	0.	0.	0.
SD	0.	1.	2.	30.	7.	50.	0.	6.	1.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 201
TOTAL NUMBER OF MANUFACTURING PLANTS... 729

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4000.	50.	278.	202517.	427.
FLOW (MGY)	2306.	18.	139.	101321.	230.
TOTAL CAPITAL COST	980416.	45186.	140136.	102158960.	111708.
TOTAL ANNUAL O&M COST	105867.	2321.	9906.	7221226.	11017.
TOTAL ANNUAL COST	230379.	8214.	27702.	20195008.	25112.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
7221226.	5107947.	7866236.	20195408.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	105867.	102930.	104398.	208797.	2076.	2.
50000. TO 100000.	89676.	50727.	70215.	702153.	14105.	10.
10000. TO 50000.	49121.	10014.	17898.	3114215.	7958.	174.
0. TO 10000.	9883.	2321.	5886.	3196120.	1666.	543.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1225519.	1033825.	1119719.	5598595.	88939.	5.
500000. TO 1000000.	930490.	506590.	659687.	12534048.	144701.	19.
100000. TO 500000.	496868.	100230.	179440.	94206032.	80377.	525.
0. TO 100000.	99979.	56483.	85348.	15362589.	10425.	180.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	108.	0.	0.	76.	0.	0.	762.	35.	0.	0.	0.
MIN	0.	3.	0.	0.	8.	0.	0.	33.	1.	0.	0.	0.
AVE	0.	11.	0.	0.	18.	0.	0.	106.	5.	0.	0.	0.
TOT	0.	8382.	0.	0.	13167.	0.	0.	77260.	3349.	0.	0.	0.
SD	0.	12.	0.	0.	9.	0.	0.	87.	4.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	3.	0.	0.	64.	0.	0.	26.	13.	0.	0.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	0.	0.	5.	0.	0.	3.	1.	0.	0.	0.
TOT	0.	468.	0.	0.	3899.	0.	0.	2191.	663.	0.	0.	0.
SD	0.	0.	0.	0.	7.	0.	0.	3.	1.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 202
TOTAL NUMBER OF MANUFACTURING PLANTS... 1182

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2100.	18.	107.	126823.	155.
FLOW (MGY)	658.	4.	34.	40695.	49.
TOTAL CAPITAL COST	437771.	16860.	55886.	66056688.	38925.
TOTAL ANNUAL O&M COST	36264.	679.	2899.	3426690.	2723.
TOTAL ANNUAL COST	89832.	2874.	9997.	11816675.	7630.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
3426690.	3302834.	5086362.	11815886.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	36264.	10018.	16650.	382959.	7680.	23.
0. TO 10000.	9403.	679.	2626.	3043756.	1617.	1159.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	547213.	527251.	537232.	1074464.	14117.	2.
100000. TO 500000.	472044.	100393.	146033.	28038352.	56981.	192.
0. TO 100000.	99968.	21075.	54110.	53461008.	19608.	988.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	237.	0.	0.	0.	0.	201.	0.	0.	0.	0.
MIN	0.	0.	10.	0.	0.	0.	0.	7.	0.	0.	0.	0.
AVE	0.	0.	32.	0.	0.	0.	0.	24.	0.	0.	0.	0.
TOT	0.	0.	37640.	0.	0.	0.	0.	28414.	0.	0.	0.	0.
SD	0.	0.	21.	0.	0.	0.	0.	18.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	29.	0.	0.	0.	0.	8.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	2.	0.	0.	0.	0.	1.	0.	0.	0.	0.
TOT	0.	0.	2107.	0.	0.	0.	0.	1320.	0.	0.	0.	0.
SD	0.	0.	2.	0.	0.	0.	0.	1.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 203
TOTAL NUMBER OF MANUFACTURING PLANTS... 691

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3360.	28.	213.	147275.	261.
FLOW (MGY)	3174.	16.	192.	132374.	268.
TOTAL CAPITAL COST	2144887.	73886.	305726.	211256496.	216633.
TOTAL ANNUAL O&M COST	130828.	2144.	13463.	9302654.	12766.
TOTAL ANNUAL COST	403228.	12039.	52287.	36130480.	40173.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
9302654.	10562824.	16266742.	36132208.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	130828.	130828.	130828.	130828.	0.	1.
50000. TO 100000.	93117.	50250.	65843.	1119335.	13731.	17.
10000. TO 50000.	48203.	10074.	18099.	5809681.	8477.	321.
0. TO 10000.	9997.	2144.	6372.	2242877.	2017.	352.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2681108.	1013014.	1412710.	31079632.	375142.	22.
500000. TO 1000000.	992309.	500594.	678245.	81389344.	141468.	120.
100000. TO 500000.	497849.	102165.	277810.	151128608.	96351.	544.
0. TO 100000.	97389.	92358.	94942.	474711.	1790.	5.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	213.	0.	0.	0.	978.	0.	954.	0.	0.	0.	0.
MIN	0.	4.	0.	0.	0.	44.	0.	27.	0.	0.	0.	0.
AVE	0.	21.	0.	0.	0.	161.	0.	123.	0.	0.	0.	0.
TOT	0.	14560.	0.	0.	0.	111402.	0.	85290.	0.	0.	0.	0.
SD	0.	20.	0.	0.	0.	102.	0.	95.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4.	0.	0.	0.	90.	0.	29.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	0.	0.	0.	9.	0.	4.	0.	0.	0.	0.
TOT	0.	633.	0.	0.	0.	6222.	0.	2447.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	10.	0.	3.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2041
TOTAL NUMBER OF MANUFACTURING PLANTS... 45

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1600.	125.	309.	13889.	284.
FLOW (MGY)	390.	20.	70.	3136.	68.
TOTAL CAPITAL COST	337045.	57104.	111280.	5007584.	56653.
TOTAL ANNUAL O&M COST	22603.	2562.	5715.	257166.	3871.
TOTAL ANNUAL COST	65408.	9814.	19847.	893130.	11052.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
257166.	250379.	385584.	893129.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	22603.	10141.	13957.	83742.	4656.	6.
0. TO 10000.	8515.	2562.	4447.	173424.	1458.	39.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	404454.	111593.	162266.	4543454.	72199.	28.
0. TO 100000.	99756.	68525.	86215.	1465654.	9456.	17.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	207.	0.	130.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	39.	0.	18.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	72.	0.	39.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	3255.	0.	1752.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	34.	0.	22.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	18.	0.	5.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	2.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	4.	0.	2.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	182.	0.	76.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	3.	0.	1.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2042
TOTAL NUMBER OF MANUFACTURING PLANTS... 58

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1000.	115.	261.	15126.	194.
FLOW (MGY)	366.	21.	85.	4918.	67.
TOTAL CAPITAL COST	324799.	60056.	127721.	7407820.	95750.
TOTAL ANNUAL O&M COST	20711.	2368.	6457.	374484.	3546.
TOTAL ANNUAL COST	61960.	9995.	22677.	1315273.	10582.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
374484.	370391.	570402.	1315277.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	20711.	10382.	13537.	108299.	3732.	8.
0. TO 10000.	9709.	2368.	5324.	266185.	1773.	50.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	389758.	100247.	165542.	8111553.	65636.	49.
0. TO 100000.	97314.	72068.	86426.	777837.	9490.	9.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	200.	0.	124.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	41.	0.	20.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	83.	0.	45.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	4788.	0.	2620.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	34.	0.	22.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	16.	0.	5.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	5.	0.	2.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	268.	0.	106.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	3.	0.	1.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2043
TOTAL NUMBER OF MANUFACTURING PLANTS... 10

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4200.	430.	976.	9760.	1164.
FLOW (MGY)	349.	27.	87.	871.	97.
TOTAL CAPITAL COST	326017.	68982.	128911.	1289112.	75874.
TOTAL ANNUAL O&M COST	24231.	3240.	7100.	70996.	6375.
TOTAL ANNUAL COST	65635.	12000.	23471.	234713.	15992.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
70996.	64456.	99262.	234713.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	24231.	10796.	17513.	35027.	9500.	2.
0. TO 10000.	5528.	3240.	4496.	35969.	796.	8.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	391220.	105721.	162684.	1464155.	92779.	9.
0. TO 100000.	82779.	82779.	82779.	82779.	0.	1.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	201.	0.	125.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	46.	0.	23.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	83.	0.	46.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	832.	0.	457.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	46.	0.	30.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	19.	0.	5.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	2.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	5.	0.	2.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	51.	0.	20.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	5.	0.	1.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1969 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2044
TOTAL NUMBER OF MANUFACTURING PLANTS... 9

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	450.	150.	219.	1975.	101.
FLOW (MGY)	296.	99.	144.	1298.	67.
TOTAL CAPITAL COST	248809.	130631.	160613.	1445516.	40289.
TOTAL ANNUAL O&M COST	12393.	535C.	8330.	74966.	2839.
TOTAL ANNUAL COST	43992.	21940.	28727.	258547.	7773.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
74966.	72276.	111305.	258547.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	12393.	10446.	11679.	35038.	1072.	3.
0. TO 10000.	8815.	5350.	6655.	39929.	1530.	6.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	298571.	156757.	192736.	1734621.	48346.	9.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	155.	0.	94.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	84.	0.	46.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	102.	0.	58.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	519.	0.	526.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	24.	0.	16.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	10.	0.	3.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	4.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	6.	0.	2.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	56.	0.	19.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	2.	0.	1.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2045
TOTAL NUMBER OF MANUFACTURING PLANTS... 16

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	285.	50.	136.	2180.	82.
FLOW (MGY)	151.	28.	72.	1155.	42.
TOTAL CAPITAL COST	199876.	80423.	126031.	2016498.	45618.
TOTAL ANNUAL OEM COST	9802.	3139.	6058.	96924.	2598.
TOTAL ANNUAL COST	34851.	13615.	22064.	353020.	8313.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
96924.	100825.	155270.	353019.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	0.	0.	0.	0.	0.	0.
0. TO 10000.	9802.	3139.	6058.	96924.	2598.	16.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	239851.	101561.	168982.	2027789.	52076.	12.
0. TO 100000.	98979.	96508.	98002.	392007.	1194.	4.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	128.	0.	72.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	53.	0.	27.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	82.	0.	44.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	1310.	0.	706.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	28.	0.	17.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL OEM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	7.	0.	3.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	2.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	4.	0.	2.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	69.	0.	28.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	2.	0.	1.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2046
TOTAL NUMBER OF MANUFACTURING PLANTS... 21

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2700.	25.	537.	11279.	649.
FLOW (MGY)	3488.	20.	775.	16265.	921.
TOTAL CAPITAL COST	2463442.	100637.	804044.	16884928.	656589.
TOTAL ANNUAL O&M COST	142560.	2345.	38264.	803538.	38086.
TOTAL ANNUAL COST	455417.	15126.	140377.	2947919.	121322.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
803538.	844246.	1300138.	2947922.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	142560.	106148.	124354.	248708.	25747.	2.
50000. TO 100000.	87477.	55643.	68804.	275214.	13456.	4.
10000. TO 50000.	47866.	10055.	27458.	247120.	14505.	9.
0. TO 10000.	9488.	2345.	5416.	32496.	2953.	6.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3202472.	1247538.	1853369.	16680323.	658297.	9.
500000. TO 1000000.	965595.	519850.	751786.	3007143.	214781.	4.
100000. TO 500000.	428373.	130828.	282868.	2262941.	116121.	8.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	441.	0.	0.	0.	1114.	0.	908.	0.	0.	0.	0.
MIN	0.	9.	0.	0.	0.	61.	0.	31.	0.	0.	0.	0.
AVE	0.	123.	0.	0.	0.	394.	0.	286.	0.	0.	0.	0.
TOT	0.	2586.	0.	0.	0.	8284.	0.	6015.	0.	0.	0.	0.
SD	0.	118.	0.	0.	0.	296.	0.	243.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	7.	0.	0.	0.	111.	0.	25.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	2.	0.	0.	0.	29.	0.	7.	0.	0.	0.	0.
TOT	0.	51.	0.	0.	0.	603.	0.	150.	0.	0.	0.	0.
SD	0.	2.	0.	0.	0.	30.	0.	7.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 205
TOTAL NUMBER OF MANUFACTURING PLANTS... 274

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2500.	195.	379.	103922.	274.
FLOW (MGY)	139.	7.	19.	5107.	15.
TOTAL CAPITAL COST	210089.	29877.	56777.	15556987.	24252.
TOTAL ANNUAL O&M COST	12268.	1310.	2648.	725558.	1187.
TOTAL ANNUAL COST	38549.	5104.	9859.	2701230.	4235.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
725558.	777849.	1197887.	2701294.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	12268.	12268.	12268.	12268.	0.	1.
0. TO 10000.	7419.	1310.	2613.	713291.	1036.	273.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	262611.	100878.	136398.	4364741.	38403.	32.
0. TO 100000.	98923.	37347.	62320.	15081515.	14415.	242.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	14.	0.	0.	0.	125.	0.	71.	0.	0.	0.	0.
MIN	0.	1.	0.	0.	0.	20.	0.	9.	0.	0.	0.	0.
AVE	0.	3.	0.	0.	0.	37.	0.	17.	0.	0.	0.	0.
TOT	0.	750.	0.	0.	0.	10021.	0.	4786.	0.	0.	0.	0.
SD	0.	2.	0.	0.	0.	14.	0.	8.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	1.	0.	0.	0.	8.	0.	3.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
TOT	0.	116.	0.	0.	0.	368.	0.	241.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2061
TOTAL NUMBER OF MANUFACTURING PLANTS... 49

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3450.	6.	195.	9544.	504.
FLOW (MGY)	81468.	146.	4597.	225261.	11896.
TOTAL CAPITAL COST	39821440.	425130.	3630892.	177913728.	5949940.
TOTAL ANNUAL O&M COST	3125120.	18508.	253405.	12416831.	467721.
TOTAL ANNUAL COST	8182441.	73005.	714524.	35011664.	1223035.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
12416831.	8895685.	13699350.	35011856.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3125120.	560409.	1094480.	6566880.	1004518.	6.
100000. TO 500000.	459345.	102396.	235710.	4478489.	122050.	19.
50000. TO 100000.	95505.	52461.	71931.	1078961.	13590.	15.
10000. TO 50000.	49440.	18508.	32501.	292510.	11597.	9.
0. TO 10000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	53758912.	5231141.	11758626.	176379392.	12108570.	15.
1000000. TO 5000000.	4295588.	1024012.	2039353.	61180608.	853564.	30.
500000. TO 1000000.	755214.	573925.	655916.	2623663.	76456.	4.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4064.	0.	21509.	0.	8209.	0.	6039.	0.	0.	0.	0.
MIN	0.	36.	0.	42.	0.	245.	0.	102.	0.	0.	0.	0.
AVE	0.	383.	0.	1254.	0.	1262.	0.	732.	0.	0.	0.	0.
TOT	0.	18777.	0.	61429.	0.	61844.	0.	35863.	0.	0.	0.	0.
SD	0.	618.	0.	3150.	0.	1307.	0.	941.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	50.	0.	695.	0.	2045.	0.	335.	0.	0.	0.	0.
MIN	0.	1.	0.	3.	0.	12.	0.	2.	0.	0.	0.	0.
AVE	0.	6.	0.	50.	0.	173.	0.	24.	0.	0.	0.	0.
TOT	0.	276.	0.	2464.	0.	8492.	0.	1184.	0.	0.	0.	0.
SD	0.	8.	0.	103.	0.	308.	0.	49.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2062
TOTAL NUMBER OF MANUFACTURING PLANTS... 18

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1500.	35.	389.	6995.	380.
FLOW (MGY)	1459.	34.	319.	5735.	355.
TOTAL CAPITAL COST	2304259.	171860.	692505.	12465089.	535235.
TOTAL ANNUAL O&M COST	146353.	6348.	34189.	615409.	33590.
TOTAL ANNUAL COST	438999.	28174.	122137.	2198471.	101198.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
615409.	623254.	959811.	2198474.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	146353.	146353.	146353.	146353.	0.	1.
50000. TO 100000.	68706.	52637.	58822.	176465.	8649.	3.
10000. TO 50000.	45277.	13908.	26187.	261869.	11428.	10.
0. TO 10000.	8659.	6348.	7680.	30722.	1015.	4.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3110802.	1055905.	1663872.	11507108.	680464.	7.
500000. TO 1000000.	797603.	511851.	621242.	3727449.	117537.	6.
100000. TO 500000.	430652.	232011.	318662.	1593308.	72365.	5.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	239.	0.	482.	0.	1046.	0.	537.	0.	0.	0.	0.
MIN	0.	12.	0.	10.	0.	110.	0.	40.	0.	0.	0.	0.
AVE	0.	64.	0.	99.	0.	364.	0.	165.	0.	0.	0.	0.
TOT	0.	1156.	0.	1782.	0.	6551.	0.	2975.	0.	0.	0.	0.
SD	0.	57.	0.	115.	0.	240.	0.	126.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4.	0.	26.	0.	103.	0.	14.	0.	0.	0.	0.
MIN	0.	1.	0.	1.	0.	4.	0.	1.	0.	0.	0.	0.
AVE	0.	2.	0.	5.	0.	23.	0.	4.	0.	0.	0.	0.
TOT	0.	27.	0.	97.	0.	423.	0.	68.	0.	0.	0.	0.
SD	0.	1.	0.	6.	0.	24.	0.	3.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2063
TOTAL NUMBER OF MANUFACTURING PLANTS... 60

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	400.	5.	125.	7498.	104.
FLOW (MGY)	2574.	58.	786.	47149.	670.
TOTAL CAPITAL COST	3172344.	262135.	1286129.	77167776.	740836.
TOTAL ANNUAL O&M COST	214197.	11053.	77085.	4625074.	53673.
TOTAL ANNUAL COST	617085.	44344.	240423.	14425405.	147483.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4625074.	3858388.	5941915.	14425377.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	214197.	113613.	157861.	2367912.	32296.	15.
50000. TO 100000.	98652.	52147.	73296.	1392620.	14560.	19.
10000. TO 50000.	45487.	11053.	33252.	864552.	11751.	26.
0. TO 10000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	4282662.	1042676.	2147688.	90202896.	914498.	42.
500000. TO 1000000.	981958.	509263.	858641.	12879612.	173117.	15.
100000. TO 500000.	383785.	353883.	364693.	1094078.	16585.	3.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	337.	0.	761.	0.	1351.	0.	723.	0.	0.	0.	0.
MIN	0.	20.	0.	19.	0.	160.	0.	62.	0.	0.	0.	0.
AVE	0.	128.	0.	236.	0.	619.	0.	303.	0.	0.	0.	0.
TOT	0.	7673.	0.	14174.	0.	37150.	0.	18171.	0.	0.	0.	0.
SD	0.	82.	0.	196.	0.	298.	0.	168.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	6.	0.	39.	0.	150.	0.	19.	0.	0.	0.	0.
MIN	0.	1.	0.	1.	0.	7.	0.	2.	0.	0.	0.	0.
AVE	0.	3.	0.	13.	0.	54.	0.	8.	0.	0.	0.	0.
TOT	0.	159.	0.	784.	0.	3223.	0.	459.	0.	0.	0.	0.
SD	0.	1.	0.	10.	0.	38.	0.	5.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 207
TOTAL NUMBER OF MANUFACTURING PLANTS... 87

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3300.	90.	570.	49630.	522.
FLOW (MGY)	377.	15.	94.	8200.	77.
TOTAL CAPITAL COST	368596.	59169.	149487.	13005369.	70562.
TOTAL ANNUAL O&M COST	24811.	2410.	7812.	679603.	4701.
TOTAL ANNUAL COST	70585.	9924.	26796.	2331264.	13583.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
679603.	650268.	1001413.	2331283.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	24811.	10009.	14942.	283899.	4726.	19.
0. TO 10000.	9994.	2410.	5819.	395704.	1979.	68.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	460745.	101002.	201580.	15320052.	84720.	76.
0. TO 100000.	95123.	73956.	85151.	936665.	7124.	11.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	28.	0.	0.	0.	210.	0.	131.	0.	0.	0.	0.
MIN	0.	3.	0.	0.	0.	39.	0.	18.	0.	0.	0.	0.
AVE	0.	9.	0.	0.	0.	90.	0.	50.	0.	0.	0.	0.
TOT	0.	807.	0.	0.	0.	7855.	0.	4343.	0.	0.	0.	0.
SD	0.	6.	0.	0.	0.	40.	0.	26.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	2.	0.	0.	0.	18.	0.	5.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	0.	0.	0.	5.	0.	2.	0.	0.	0.	0.
TOT	0.	62.	0.	0.	0.	447.	0.	170.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	4.	0.	1.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 208
TOTAL NUMBER OF MANUFACTURING PLANTS... 646

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5500.	4.	207.	133488.	379.
FLOW (MGY)	3925.	1.	93.	59784.	273.
TOTAL CAPITAL COST	1991000.	17520.	157246.	101580880.	195728.
TOTAL ANNUAL O&M COST	153259.	819.	6803.	4394441.	12322.
TOTAL ANNUAL COST	403924.	3044.	26773.	17295488.	37004.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4394441.	5079043.	7821723.	17295200.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	153259.	147342.	150300.	300600.	4187.	2.
50000. TO 100000.	79513.	50920.	62899.	566095.	9694.	9.
10000. TO 50000.	47015.	10439.	19521.	1659254.	8165.	85.
0. TO 10000.	9957.	819.	3397.	1868609.	1884.	550.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2488750.	1005192.	1448924.	19836016.	501186.	13.
500000. TO 1000000.	890651.	506518.	639584.	24943776.	134734.	39.
100000. TO 500000.	492392.	10009..	193009.	61762832.	96557.	320.
0. TO 100000.	99848.	21900.	78236.	21436560.	13820.	274.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	131.	0.	0.	0.	967.	0.	893.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	12.	0.	5.	0.	0.	0.	0.
AVE	0.	6.	0.	0.	0.	90.	0.	61.	0.	0.	0.	0.
TOT	0.	4103.	0.	0.	0.	58215.	0.	39259.	0.	0.	0.	0.
SD	0.	11.	0.	0.	0.	100.	0.	85.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	3.	0.	0.	0.	118.	0.	32.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	4.	0.	2.	0.	0.	0.	0.
TOT	0.	310.	0.	0.	0.	2867.	0.	1217.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	9.	0.	3.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 209
TOTAL NUMBER OF MANUFACTURING PLANTS... 599

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4000.	3.	137.	82144.	257.
FLOW (MGY)	5600.	3.	151.	90659.	341.
TOTAL CAPITAL COST	2084463.	19185.	170898.	102367984.	163413.
TOTAL ANNUAL O&M COST	243379.	669.	10805.	6472421.	16393.
TOTAL ANNUAL COST	508105.	3106.	32510.	19473376.	36923.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
6472421.	5118398.	7882330.	19473136.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	243379.	104642.	163430.	653721.	67403.	4.
50000. TO 100000.	87160.	51518.	63985.	255941.	16255.	4.
10000. TO 50000.	47584.	10029.	18888.	3569748.	8559.	189.
0. TO 10000.	9828.	669.	4958.	1993109.	2199.	402.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2605578.	1033089.	1619295.	9715774.	626499.	6.
500000. TO 1000000.	881008.	503475.	616880.	15421990.	96594.	25.
100000. TO 500000.	491542.	100556.	214379.	92183088.	99219.	430.
0. TO 100000.	98978.	23981.	77113.	10641541.	18953.	138.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	407.	0.	936.	0.	742.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	14.	0.	5.	0.	0.	0.	0.
AVE	0.	0.	0.	11.	0.	101.	0.	59.	0.	0.	0.	0.
TOT	0.	0.	0.	6634.	0.	60553.	0.	35180.	0.	0.	0.	0.
SD	0.	0.	0.	25.	0.	81.	0.	59.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	43.	0.	164.	0.	37.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	0.	1.	0.	7.	0.	2.	0.	0.	0.	0.
TOT	0.	0.	0.	877.	0.	4192.	0.	1403.	0.	0.	0.	0.
SD	0.	0.	0.	3.	0.	11.	0.	3.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 22
TOTAL NUMBER OF MANUFACTURING PLANTS... 1021

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	9000.	35.	537.	548467.	602.
FLOW (MGY)	3206.	14.	189.	193383.	238.
TOTAL CAPITAL COST	1566488.	49029.	229975.	234804912.	161930.
TOTAL ANNUAL O&M COST	93173.	1768.	10142.	10354735.	8688.
TOTAL ANNUAL COST	269523.	8247.	39345.	40170928.	28800.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
10354735.	11740244.	18079968.	40174944.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	93173.	61295.	73546.	441277.	12106.	6.
10000. TO 50000.	49678.	10009.	17332.	5944801.	7544.	343.
0. TO 10000.	9899.	1768.	5906.	3968734.	2079.	672.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1958110.	1055992.	1284152.	19262288.	267985.	15.
500000. TO 1000000.	972246.	500314.	635470.	62276048.	124608.	98.
100000. TO 500000.	498866.	101263.	243250.	207249088.	100108.	852.
0. TO 100000.	99842.	61286.	84311.	4721421.	11849.	56.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	42.	200.	217.	0.	757.	0.	592.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	25.	0.	14.	0.	0.	0.	0.
AVE	0.	6.	37.	9.	0.	131.	0.	81.	0.	0.	0.	0.
TOT	0.	3133.	20646.	8437.	0.	119818.	0.	82764.	0.	0.	0.	0.
SD	0.	5.	27.	16.	0.	91.	0.	63.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	1.	15.	9.	0.	70.	0.	16.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	2.	1.	0.	7.	0.	2.	0.	0.	0.	0.
TOT	0.	252.	941.	698.	0.	6158.	0.	2305.	0.	0.	0.	0.
SD	0.	0.	2.	1.	0.	7.	0.	1.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 221
TOTAL NUMBER OF MANUFACTURING PLANTS... 199

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	9000.	280.	865.	172225.	915.
FLOW (MGY)	2415.	74.	232.	46113.	246.
TOTAL CAPITAL COST	1280798.	147929.	286710.	57055312.	145513.
TOTAL ANNUAL OGM COST	81627.	4731.	11289.	2246607.	8469.
TOTAL ANNUAL COST	244288.	24100.	47702.	9492753.	26862.

ANNUAL COST OF WASTE TREATMENT

OGM	REPLACEMENT	INTEREST	TOTAL
2246607.	2852765.	4393256.	9492628.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	81627.	81627.	81627.	81627.	0.	1.
10000. TO 50000.	49678.	10009.	16759.	1323968.	7616.	79.
0. TO 10000.	9841.	4731.	7068.	841061.	1442.	119.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1600997.	1080500.	1270057.	3810173.	287611.	3.
500000. TO 1000000.	957721.	500590.	637156.	15928889.	115462.	25.
100000. TO 500000.	493841.	184911.	301640.	51580368.	79655.	171.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	100.	0.	668.	0.	512.	0.	0.	0.	0.
MIN	0.	0.	0.	3.	0.	93.	0.	52.	0.	0.	0.	0.
AVE	0.	0.	0.	10.	0.	170.	0.	106.	0.	0.	0.	0.
TOT	0.	0.	0.	1980.	0.	33911.	0.	21165.	0.	0.	0.	0.
SD	0.	0.	0.	10.	0.	77.	0.	58.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL OGM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	7.	0.	61.	0.	14.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	3.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	1.	0.	8.	0.	2.	0.	0.	0.	0.
TOT	0.	0.	0.	148.	0.	1603.	0.	495.	0.	0.	0.	0.
SD	0.	0.	0.	1.	0.	6.	0.	1.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 222
TOTAL NUMBER OF MANUFACTURING PLANTS... 105

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2100.	125.	444.	46589.	367.
FLOW (MGY)	494.	29.	104.	10900.	87.
TOTAL CAPITAL COST	383380.	70890.	138292.	14520621.	62855.
TOTAL ANNUAL O&M COST	16618.	2312.	5246.	550795.	2823.
TOTAL ANNUAL COST	65307.	11465.	22808.	2394885.	10768.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
550795.	726031.	1118087.	2394912.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	16618.	10092.	13705.	95933.	2699.	7.
0. TO 10000.	8550.	2312.	4641.	454862.	1601.	98.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	479225.	101615.	179363.	17398192.	78271.	97.
0. TO 100000.	99651.	88612.	94069.	752553.	4432.	8.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	42.	200.	0.	0.	0.	0.	141.	0.	0.	0.	0.
MIN	0.	6.	40.	0.	0.	0.	0.	25.	0.	0.	0.	0.
AVE	0.	13.	75.	0.	0.	0.	0.	50.	0.	0.	0.	0.
TOT	0.	1354.	7885.	0.	0.	0.	0.	5281.	0.	0.	0.	0.
SD	0.	7.	32.	0.	0.	0.	0.	23.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	1.	12.	0.	0.	0.	0.	3.	0.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	3.	0.	0.	0.	0.	1.	0.	0.	0.	0.
TOT	0.	62.	352.	0.	0.	0.	0.	137.	0.	0.	0.	0.
SD	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 223
TOTAL NUMBER OF MANUFACTURING PLANTS... 100

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3000.	180.	480.	48047.	440.
FLOW (MGY)	2200.	100.	339.	33861.	315.
TOTAL CAPITAL COST	1566488.	241718.	479326.	47932560.	231393.
TOTAL ANNUAL O&M COST	70580.	6881.	17236.	1723583.	10969.
TOTAL ANNUAL COST	269523.	37579.	78111.	7811054.	40273.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1723583.	2396627.	3690805.	7811015.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	70580.	61295.	65937.	131875.	6566.	2.
10000. TO 50000.	45366.	10014.	18408.	1399006.	8506.	76.
0. TO 10000.	9844.	6881.	8760.	192710.	800.	22.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1958110.	1090489.	1322144.	11899297.	297717.	9.
500000. TO 1000000.	972246.	500541.	643599.	30892752.	142785.	48.
100000. TO 500000.	484101.	302148.	398233.	17124000.	43609.	43.
0. TO 100000.	0.	0.	.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	217.	0.	757.	0.	592.	0.	0.	0.	0.
MIN	0.	0.	0.	11.	0.	145.	0.	86.	0.	0.	0.	0.
AVE	0.	0.	0.	36.	0.	266.	0.	177.	0.	0.	0.	0.
TOT	0.	0.	0.	3608.	0.	26649.	0.	17676.	0.	0.	0.	0.
SD	0.	0.	0.	32.	0.	111.	0.	89.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	9.	0.	50.	0.	11.	0.	0.	0.	0.
MIN	0.	0.	0.	1.	0.	5.	0.	2.	0.	0.	0.	0.
AVE	0.	0.	0.	2.	0.	12.	0.	3.	0.	0.	0.	0.
TOT	0.	0.	0.	186.	0.	1193.	0.	344.	0.	0.	0.	0.
SD	0.	0.	0.	1.	0.	8.	0.	2.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 226
TOTAL NUMBER OF MANUFACTURING PLANTS... 164

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3250.	50.	264.	43314.	350.
FLOW (MGY)	3206.	54.	267.	43753.	344.
TOTAL CAPITAL COST	1140405.	97893.	248458.	40747120.	137051.
TOTAL ANNUAL O&M COST	93173.	3994.	13855.	2272151.	10834.
TOTAL ANNUAL COST	238004.	16882.	45409.	7447122.	28165.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2272151.	2037355.	3137526.	7447032.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	93173.	62539.	77856.	155712.	21661.	2.
10000. TO 50000.	46499.	10040.	18191.	1564394.	7941.	86.
0. TO 10000.	9899.	3994.	7264.	552082.	1608.	76.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1425506.	1055992.	1240749.	2481498.	261285.	2.
500000. TO 1000000.	791711.	500314.	616969.	9254531.	91490.	15.
100000. TO 500000.	481027.	122367.	266654.	39198192.	89750.	147.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	83.	3.	603.	0.	454.	0.	0.	0.	0.
MIN	0.	0.	0.	2.	0.	63.	0.	33.	0.	0.	0.	0.
AVE	0.	0.	0.	8.	0.	150.	0.	91.	0.	0.	0.	0.
TOT	0.	0.	0.	1256.	0.	24608.	0.	14883.	0.	0.	0.	0.
SD	0.	0.	0.	9.	0.	74.	0.	55.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	8.	0.	70.	0.	16.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	3.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	1.	0.	10.	0.	3.	0.	0.	0.	0.
TOT	0.	0.	0.	152.	0.	1627.	0.	494.	0.	0.	0.	0.
SD	0.	0.	0.	1.	0.	8.	0.	2.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 24
TOTAL NUMBER OF MANUFACTURING PLANTS... 405

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	14500.	75.	369.	149384.	774.
FLOW (MGY)	7138.	28.	221.	89627.	409.
TOTAL CAPITAL COST	2908433.	80532.	285859.	115771376.	212153.
TOTAL ANNUAL O&M COST	235249.	2150.	13116.	5312013.	15214.
TOTAL ANNUAL COST	604620.	12530.	49419.	20014656.	41995.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
5312013.	5788568.	8914391.	20014960.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	235249.	235249.	235249.	235249.	0.	1.
50000. TO 100000.	82270.	50092.	61082.	488658.	11675.	8.
10000. TO 50000.	48079.	10020.	17091.	3195966.	8079.	187.
0. TO 10000.	9970.	2150.	6661.	1392194.	2201.	209.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3635541.	1039375.	1478944.	14789440.	787362.	10.
500000. TO 1000000.	983634.	500791.	673431.	31651248.	130145.	47.
100000. TO 500000.	496428.	100665.	282397.	98274160.	90217.	348.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	752.	0.	1084.	0.	1073.	0.	0.	0.	0.
MIN	0.	0.	0.	3.	0.	48.	0.	29.	0.	0.	0.	0.
AVE	0.	0.	0.	26.	0.	150.	0.	110.	0.	0.	0.	0.
TOT	0.	0.	0.	10476.	0.	60853.	0.	44441.	0.	0.	0.	0.
SD	0.	0.	0.	45.	0.	89.	0.	81.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	49.	0.	145.	0.	41.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	2.	0.	8.	0.	3.	0.	0.	0.	0.
TOT	0.	0.	0.	858.	0.	3197.	0.	1257.	0.	0.	0.	0.
SD	0.	0.	0.	3.	0.	9.	0.	3.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 26
TOTAL NUMBER OF MANUFACTURING PLANTS... 862

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4000.	12.	447.	385511.	540.
FLOW (MGY)	56563.	8.	2449.	2111424.	5615.
TOTAL CAPITAL COST	27781984.	25804.	1435260.	1237194240.	3035145.
TOTAL ANNUAL O&M COST	2068368.	898.	101696.	87661728.	214077.
TOTAL ANNUAL COST	5590107.	4190.	283989.	244798864.	596094.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
87661728.	61859696.	95263904.	244785328.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2068368.	506185.	936827.	34662592.	413459.	37.
100000. TO 500000.	485575.	100338.	210519.	34314560.	97236.	163.
50000. TO 100000.	99528.	50052.	71880.	10135070.	14522.	141.
10000. TO 50000.	49615.	10121.	26794.	7261188.	11756.	271.
0. TO 10000.	9993.	898.	5175.	1293827.	2386.	250.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	34727472.	5027460.	13624865.	735742720.	8036391.	54.
1000000. TO 5000000.	4989713.	1005977.	2107699.	630202112.	985292.	299.
500000. TO 1000000.	995335.	500127.	753808.	113825056.	130973.	151.
100000. TO 500000.	493215.	100205.	221790.	60105040.	108818.	271.
0. TO 100000.	99799.	32254.	77275.	6722966.	16445.	87.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	9994.	0.	3816.	0.	5177.	0.	0.	9668.	0.
MIN	0.	0.	0.	1.	0.	25.	0.	12.	0.	0.	2169.	0.
AVE	0.	0.	0.	387.	0.	502.	0.	518.	0.	0.	4919.	0.
TOT	0.	0.	0.	258332.	0.	432493.	0.	364328.	0.	0.	182020.	0.
SD	0.	0.	0.	1056.	0.	545.	0.	697.	0.	0.	2146.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	321.	0.	937.	0.	243.	0.	0.	1019.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	213.	0.
AVE	0.	0.	0.	18.	0.	53.	0.	17.	0.	0.	467.	0.
TOT	0.	0.	0.	12295.	0.	46048.	0.	12028.	0.	0.	17291.	0.
SD	0.	0.	0.	35.	0.	81.	0.	27.	0.	0.	210.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 261
TOTAL NUMBER OF MANUFACTURING PLANTS... 37

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3000.	250.	922.	34108.	675.
FLOW (MGY)	56563.	4681.	19284.	713504.	13447.
TOTAL CAPITAL COST	27781584.	5249210.	13183796.	487781888.	692 109.
TOTAL ANNUAL OGM COST	2068368.	350638.	867799.	32108576.	450061.
TOTAL ANNUAL COST	5590107.	1017288.	2542081.	94057008.	1260661.

ANNUAL COST OF WASTE TREATMENT

OGM	REPLACEMENT	INTEREST	TOTAL
32108576.	24389088.	37559184.	94056848.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2068368.	507910.	1012801.	28358432.	423852.	28.
100000. TO 500000.	479447.	350638.	416688.	3750194.	51418.	9.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	0.	0.	0.	0.	0.	0.
0. TO 10000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	34727472.	6561512.	16479100.	609726720.	8150220.	37.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	9904.	0.	3415.	0.	5177.	0.	0.	9668.	0.
MIN	0.	0.	0.	978.	0.	939.	0.	1163.	0.	0.	2169.	0.
AVE	0.	0.	0.	3758.	0.	1870.	0.	2635.	0.	0.	4919.	0.
TOT	0.	0.	0.	139053.	0.	69199.	0.	97511.	0.	0.	182020.	0.
SD	0.	0.	0.	2537.	0.	700.	0.	1149.	0.	0.	2146.	0.

DISTRIBUTION OF ANNUAL OGM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	321.	0.	501.	0.	228.	0.	0.	1019.	0.
MIN	0.	0.	0.	37.	0.	69.	0.	27.	0.	0.	213.	0.
AVE	0.	0.	0.	119.	0.	197.	0.	84.	0.	0.	467.	0.
TOT	0.	0.	0.	4421.	0.	7298.	0.	3098.	0.	0.	17291.	0.
SD	0.	0.	0.	75.	0.	114.	0.	53.	0.	0.	210.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 262
TOTAL NUMBER OF MANUFACTURING PLANTS... 274

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4000.	75.	554.	151858.	646.
FLOW (MGY)	21559.	199.	3207.	878664.	3974.
TOTAL CAPITAL COST	6639128.	310102.	1623593.	444864512.	1205358.
TOTAL ANNUAL O&M COST	772386.	14804.	123650.	33880016.	118908.
TOTAL ANNUAL COST	1599216.	54187.	329850.	90378832.	270864.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
33880016.	22243216.	34254544.	90377776.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	772386.	506185.	626449.	3132243.	120060.	5.
100000. TO 500000.	485575.	100759.	209420.	21989136.	91977.	105.
50000. TO 100000.	99528.	50052.	70653.	6005527.	14403.	85.
10000. TO 50000.	49332.	14804.	34857.	2753724.	9440.	79.
0. TO 10000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	8298910.	5027460.	6666376.	86662896.	1162494.	13.
1000000. TO 5000000.	4985713.	1005977.	2171636.	416954112.	1042634.	192.
500000. TO 1000000.	989594.	517233.	775830.	51204800.	124940.	66.
100000. TO 500000.	476414.	387628.	422424.	1267271.	47408.	3.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	1866.	0.	2501.	0.	2309.	0.	0.	0.	0.
MIN	0.	0.	0.	18.	0.	181.	0.	111.	0.	0.	0.	0.
AVE	0.	0.	0.	283.	0.	748.	0.	593.	0.	0.	0.	0.
TOT	0.	0.	0.	77416.	0.	205030.	0.	162428.	0.	0.	0.	0.
SD	0.	0.	0.	333.	0.	453.	0.	425.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	124.	0.	524.	0.	124.	0.	0.	0.	0.
MIN	0.	0.	0.	2.	0.	10.	0.	3.	0.	0.	0.	0.
AVE	0.	0.	0.	18.	0.	86.	0.	20.	0.	0.	0.	0.
TOT	0.	0.	0.	4976.	0.	23466.	0.	5438.	0.	0.	0.	0.
SD	0.	0.	0.	19.	0.	81.	0.	19.	0.	0.	0.	0.

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FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 263
TOTAL NUMBER OF MANUFACTURING PLANTS... 198

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4000.	12.	267.	52834.	439.
FLOW (MGY)	41606.	46.	2285.	452480.	4401.
TOTAL CAPITAL COST	11465078.	128102.	1225885.	242725424.	1251000.
TOTAL ANNUAL OGM COST	1414486.	5326.	91209.	18059360.	132106.
TOTAL ANNUAL COST	2870550.	21595.	246894.	48884976.	289573.

ANNUAL COST OF WASTE TREATMENT

OGM	REPLACEMENT	INTEREST	TOTAL
18059360.	12136270.	18689840.	48885456.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1414486.	557087.	792997.	3171987.	416263.	4.
100000. TO 500000.	301546.	100338.	178079.	8369692.	61726.	47.
50000. TO 100000.	98297.	50393.	73607.	3901185.	14701.	53.
10000. TO 50000.	49035.	10479.	29936.	2544531.	10448.	85.
0. TO 10000.	9812.	5326.	8006.	72058.	1700.	9.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	14331347.	8023343.	9838912.	39355648.	3005872.	4.
1000000. TO 5000000.	4555767.	1036380.	2008036.	204819728.	881336.	102.
500000. TO 1000000.	995335.	500127.	765806.	49011568.	131911.	64.
100000. TO 500000.	493215.	160128.	365009.	10220254.	95366.	28.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	3878.	0.	3816.	0.	3771.	0.	0.	0.	0.
MIN	0.	0.	0.	4.	0.	30.	0.	43.	0.	0.	0.	0.
AVE	0.	0.	0.	200.	0.	579.	0.	446.	0.	0.	0.	0.
TOT	0.	0.	0.	35694.	0.	114645.	0.	88384.	0.	0.	0.	0.
SD	0.	0.	0.	381.	0.	453.	0.	430.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL OGM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	235.	0.	937.	0.	243.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	3.	0.	2.	0.	0.	0.	0.
AVE	0.	0.	0.	13.	0.	63.	0.	15.	0.	0.	0.	0.
TOT	0.	0.	0.	2614.	0.	12474.	0.	2971.	0.	0.	0.	0.
SD	0.	0.	0.	22.	0.	89.	0.	22.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 264
TOTAL NUMBER OF MANUFACTURING PLANTS... 159

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4000.	65.	480.	76262.	543.
FLOW (MGY)	1358.	8.	156.	24850.	185.
TOTAL CAPITAL COST	452043.	25804.	125956.	20027056.	74503.
TOTAL ANNUAL O&M COST	49615.	898.	9167.	1457563.	8091.
TOTAL ANNUAL COST	105386.	4190.	25164.	4001003.	17484.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1457563.	1001353.	1542082.	4000997.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	49615.	10121.	17833.	873799.	9557.	49.
0. TO 10000.	9957.	898.	5307.	583785.	2426.	110.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	565053.	508249.	540744.	1622233.	29280.	3.
100000. TO 500000.	460970.	101655.	178920.	20218016.	70923.	113.
0. TO 100000.	99799.	32254.	74274.	3193709.	18631.	43.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	99.	0.	353.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	0.	1.	0.	25.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	0.	14.	0.	112.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	0.	2171.	0.	17856.	0.	0.	0.	0.	0.	0.
SD	0.	0.	0.	15.	0.	60.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	11.	0.	39.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	0.	2.	0.	7.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	0.	284.	0.	1174.	0.	0.	0.	0.	0.	0.
SD	0.	0.	0.	2.	0.	6.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 265
TOTAL NUMBER OF MANUFACTURING PLANTS... 142

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1770.	193.	401.	56974.	250.
FLOW (MGY)	576.	9.	82.	11580.	89.
TOTAL CAPITAL COST	383621.	38030.	123370.	17518560.	69442.
TOTAL ANNUAL O&M COST	25238.	1530.	6210.	881886.	4554.
TOTAL ANNUAL COST	71599.	6360.	21878.	3106704.	13315.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
881886.	875928.	1348928.	3106741.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	25238.	11182.	15495.	325405.	3640.	21.
0. TO 10000.	9955.	1530.	4599.	556481.	2112.	121.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	479526.	100205.	187439.	18369056.	85293.	98.
0. TO 100000.	98592.	47538.	80209.	3529185.	13291.	44.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	233.	0.	151.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	26.	0.	12.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	80.	0.	44.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	11329.	0.	6190.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	42.	0.	27.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	20.	0.	5.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	4.	0.	2.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	630.	0.	251.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	4.	0.	1.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 266
TOTAL NUMBER OF MANUFACTURING PLANTS... 52

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1620.	45.	259.	13475.	349.
FLOW (MGY)	4104.	70.	590.	30694.	893.
TOTAL CAPITAL COST	1616782.	158282.	468586.	24366496.	330592.
TOTAL ANNUAL O&M COST	103550.	5986.	24612.	1279821.	22861.
TOTAL ANNUAL COST	307915.	26088.	84123.	4374381.	64741.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1279821.	1218324.	1876219.	4374364.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	103550.	102584.	103067.	206134.	680.	2.
50000. TO 100000.	87318.	57643.	76122.	228365.	16122.	3.
10000. TO 50000.	45995.	10187.	20643.	763799.	8427.	37.
0. TO 10000.	9993.	5986.	8153.	81532.	1292.	10.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2020977.	1176368.	1687977.	8439885.	351538.	5.
500000. TO 1000000.	866662.	556269.	665930.	11986739.	92047.	18.
100000. TO 500000.	492148.	197853.	345922.	10031738.	87071.	29.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	896.	0.	720.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	102.	0.	57.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	279.	0.	190.	0.	0.	0.	0.
TOT	0.	0.	0.	0.	0.	14505.	0.	9862.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	181.	0.	150.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	0.	0.	85.	0.	19.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	4.	0.	2.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	0.	19.	0.	5.	0.	0.	0.	0.
TOT	0.	3.	0.	0.	0.	1010.	0.	270.	0.	0.	0.	0.
SD	0.	0.	0.	0.	0.	19.	0.	4.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 28
TOTAL NUMBER OF MANUFACTURING PLANTS... 1421

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28600.	25.	550.	781889.	1398.
FLOW (MGY)	81138.	5.	870.	1235840.	3686.
TOTAL CAPITAL COST	55021232.	8881.	610547.	867587584.	2090843.
TOTAL ANNUAL O&M COST	3499223.	820.	50241.	71392672.	148842.
TOTAL ANNUAL COST	10486918.	1947.	127791.	181591424.	408459.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
71392672.	43379376.	66804208.	181576256.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3499223.	525777.	1122310.	16834656.	830301.	15.
100000. TO 500000.	490134.	100491.	186179.	22155328.	89680.	119.
50000. TO 100000.	99113.	50024.	68495.	13082584.	13900.	191.
10000. TO 50000.	49662.	10021.	23622.	17220240.	10530.	729.
0. TO 10000.	9934.	820.	5742.	2107378.	2539.	367.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	68776528.	5055837.	13813324.	276266496.	16940432.	20.
1000000. TO 5000000.	4956188.	1002662.	2004122.	420865792.	1034506.	210.
500000. TO 1000000.	994699.	500739.	702036.	188847584.	139722.	269.
100000. TO 500000.	497658.	100448.	252034.	189529936.	105543.	752.
0. TO 100000.	99025.	11101.	53656.	9121590.	29662.	170.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	33690.	1642.	4216.	8192.	412.	2755.	81.	6869.	35.	0.	0.	0.
MIN	0.	2.	21.	0.	0.	0.	.	0.	0.	0.	0.	0.
AVE	276.	39.	213.	85.	33.	334.	36.	253.	8.	0.	0.	0.
TOT	106464.	47280.	259143.	121038.	20346.	101899.	3847.	206886.	780.	0.	0.	0.
SD	2201.	90.	273.	341.	36.	307.	8.	453.	7.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	444.	25.	982.	371.	1202.	288.	15.	484.	13.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	11.	1.	25.	6.	23.	19.	2.	7.	2.	0.	0.	0.
TOT	4343.	1369.	30993.	7953.	14524.	5763.	225.	6036.	188.	0.	0.	0.
SD	33.	1.	64.	16.	72.	27.	2.	24.	3.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2812
TOTAL NUMBER OF MANUFACTURING PLANTS... 32

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2500.	87.	670.	21443.	689.
FLOW (MGY)	2182.	37.	767.	24544.	698.
TOTAL CAPITAL COST	948826.	71390.	391448.	12526327.	266781.
TOTAL ANNUAL O&M COST	160573.	4702.	59721.	1911075.	51023.
TOTAL ANNUAL COST	277158.	13769.	109435.	3501914.	84798.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1911075.	626316.	964527.	3501917.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	160573.	105578.	136908.	1095267.	20561.	8.
50000. TO 100000.	83289.	54100.	66724.	467069.	12475.	7.
10000. TO 50000.	47642.	10791.	22386.	335783.	12595.	15.
0. TO 10000.	8260.	4702.	6481.	12962.	2516.	2.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1280914.	1030760.	1123390.	6740342.	100715.	6.
500000. TO 1000000.	867186.	519952.	686354.	5490834.	128530.	8.
100000. TO 500000.	468756.	149029.	269588.	4582988.	113370.	17.
0. TO 100000.	96377.	96377.	96377.	96377.	0.	1.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	52.	706.	191.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	3.	65.	4.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	20.	308.	63.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	646.	9867.	2013.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	15.	195.	58.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	2.	137.	21.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	51.	8.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	35.	1629.	247.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	1.	44.	7.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2813
TOTAL NUMBER OF MANUFACTURING PLANTS... 115

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1500.	25.	108.	12435.	212.
FLOW (MGY)	2565.	32.	322.	37019.	419.
TOTAL CAPITAL COST	1179187.	56201.	223724.	25728304.	180887.
TOTAL ANNUAL O&M COST	205684.	3850.	27724.	3188220.	30486.
TOTAL ANNUAL COST	355441.	11003.	56137.	6455745.	53331.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
3188220.	1286415.	1981078.	6455713.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	205684.	118802.	146656.	586626.	40543.	4.
50000. TO 100000.	91794.	50330.	68673.	824082.	14808.	12.
10000. TO 50000.	46945.	10149.	22807.	1596463.	9901.	70.
0. TO 10000.	9681.	3850.	6244.	181069.	1545.	29.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1591901.	1165776.	1311304.	3933913.	243059.	3.
500000. TO 1000000.	921418.	529125.	679203.	8150438.	116204.	12.
100000. TO 500000.	498236.	102984.	243889.	21706096.	104024.	89.
0. TO 100000.	98384.	75871.	85732.	943057.	7082.	11.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	65.	856.	258.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	2.	51.	3.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	11.	185.	28.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	1246.	21264.	3219.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	10.	135.	37.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	2.	176.	27.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	23.	4.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	89.	2695.	404.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	26.	4.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2815
TOTAL NUMBER OF MANUFACTURING PLANTS... 71

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1000.	26.	179.	12703.	218.
FLOW (MGY)	778.	13.	127.	8989.	155.
TOTAL CAPITAL COST	809451.	67039.	222185.	15775106.	158594.
TOTAL ANNUAL O&M COST	67905.	2490.	12389.	879649.	11669.
TOTAL ANNUAL COST	170705.	11004.	40607.	2883073.	31617.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
879649.	788755.	1214682.	2883085.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	67905.	67905.	67905.	67905.	0.	1.
10000. TO 50000.	44460.	10101.	19282.	578457.	10348.	30.
0. TO 10000.	9592.	2490.	5832.	233287.	2264.	40.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1092757.	1092757.	1092757.	1092757.	0.	1.
500000. TO 1000000.	985804.	518337.	708228.	6374050.	145095.	9.
100000. TO 500000.	498580.	101253.	231278.	13645399.	97111.	59.
0. TO 100000.	93687.	90503.	92095.	184190.	2251.	2.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	57.	51.	224.	83.	51.	0.	0.	344.	0.	0.	0.	0.
MIN	6.	3.	21.	2.	8.	0.	0.	27.	0.	0.	0.	0.
AVE	14.	12.	66.	14.	20.	0.	0.	96.	0.	0.	0.	0.
TOT	1029.	847.	4718.	984.	1412.	0.	0.	6784.	0.	0.	0.	0.
SD	10.	10.	44.	16.	10.	0.	0.	69.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	10.	2.	16.	6.	26.	0.	0.	9.	0.	0.	0.	0.
MIN	0.	1.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	2.	1.	3.	1.	5.	0.	0.	2.	0.	0.	0.	0.
TOT	119.	42.	178.	63.	322.	0.	0.	157.	0.	0.	0.	0.
SD	2.	0.	3.	1.	5.	0.	0.	2.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2816
TOTAL NUMBER OF MANUFACTURING PLANTS... 31

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1450.	75.	330.	10216.	319.
FLOW (MGY)	4578.	75.	749.	23212.	902.
TOTAL CAPITAL COST	1672038.	110785.	404909.	12552169.	292577.
TOTAL ANNUAL O&M COST	322873.	8299.	57473.	1781677.	58282.
TOTAL ANNUAL COST	535222.	22369.	108897.	3375800.	95240.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1781677.	627608.	966517.	3375801.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	322873.	100491.	149331.	746654.	97255.	5.
50000. TO 100000.	98768.	54640.	68113.	544904.	15732.	8.
10000. TO 50000.	46543.	10323.	29537.	472599.	11575.	16.
0. TO 10000.	9224.	8299.	8762.	17523.	654.	2.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2257250.	2257250.	2257250.	2257250.	0.	1.
500000. TO 1000000.	984263.	507886.	711710.	9252227.	163097.	13.
100000. TO 500000.	478175.	149560.	319762.	5435949.	113355.	17.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	93.	1159.	420.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	5.	99.	8.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	21.	320.	64.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	644.	9922.	1986.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	17.	202.	75.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	3.	277.	43.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	1.	7.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	49.	7.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	34.	1518.	230.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	1.	50.	8.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2818
TOTAL NUMBER OF MANUFACTURING PLANTS... 167

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10800.	50.	592.	98848.	1446.
FLOW (MGY)	81138.	97.	3356.	560412.	9620.
TOTAL CAPITAL COST	55021232.	198915.	2098882.	350513408.	5627175.
TOTAL ANNUAL OEM COST	3499223.	11049.	159281.	26599856.	366778.
TOTAL ANNUAL COST	10486918.	36311.	425840.	71115200.	1079237.

ANNUAL COST OF WASTE TREATMENT

OEM	REPLACEMENT	INTEREST	TOTAL
26599856.	17525664.	26989504.	71115024.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3499223.	525777.	1386208.	11089670.	1071386.	8.
100000. TO 500000.	490134.	100740.	222918.	10477127.	107963.	47.
50000. TO 100000.	99113.	50137.	70095.	3084189.	12930.	44.
10000. TO 50000.	49574.	11049.	28663.	1949108.	12139.	68.
0. TO 10000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	74278624.	5044923.	15712059.	267105008.	19821616.	17.
1000000. TO 5000000.	4975946.	1003745.	2000344.	164028288.	999530.	82.
500000. TO 1000000.	984342.	517793.	737555.	31714880.	137714.	43.
100000. TO 500000.	486630.	268536.	413984.	10349590.	59033.	25.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	33690.	1642.	4216.	8192.	412.	0.	0.	6869.	0.	0.	0.	0.
MIN	12.	10.	61.	10.	19.	0.	0.	86.	0.	0.	0.	0.
AVE	614.	109.	384.	317.	67.	0.	0.	608.	0.	0.	0.	0.
TOT	102500.	18238.	64165.	52865.	11252.	0.	0.	101495.	0.	0.	0.	0.
SD	3321.	189.	500.	886.	52.	0.	0.	817.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL OEM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	444.	25.	973.	371.	1202.	0.	0.	484.	0.	0.	0.	0.
MIN	1.	1.	2.	1.	4.	0.	0.	2.	0.	0.	0.	0.
AVE	22.	2.	41.	15.	59.	0.	0.	20.	0.	0.	0.	0.
TOT	3633.	363.	6810.	2562.	9831.	0.	0.	3402.	0.	0.	0.	0.
SD	47.	3.	101.	39.	128.	0.	0.	49.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 2819
TOTAL NUMBER OF MANUFACTURING PLANTS... 237

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	14000.	50.	343.	81381.	1004.
FLOW (MGY)	26677.	36.	619.	146590.	1891.
TOTAL CAPITAL COST	4044253.	60178.	316257.	74952944.	416758.
TOTAL ANNUAL O&M COST	1139082.	3900.	45348.	10747403.	94379.
TOTAL ANNUAL COST	1767002.	11825.	85512.	20266320.	147001.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
10747403.	3747646.	5771373.	20266416.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1139082.	787954.	963518.	1927036.	248284.	2.
100000. TO 500000.	263381.	105311.	155798.	2025379.	46360.	13.
50000. TO 100000.	98149.	50886.	70203.	3088914.	14413.	44.
10000. TO 50000.	49344.	10148.	24395.	3439744.	11380.	141.
0. TO 10000.	9739.	3900.	7190.	266351.	1715.	37.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	6674738.	6674738.	6674738.	6674738.	0.	1.
1000000. TO 5000000.	4488472.	1011935.	1572020.	17292224.	1002322.	11.
500000. TO 1000000.	998783.	5 2766.	676064.	31098928.	134965.	46.
100000. TO 500000.	497889.	103113.	263419.	45571424.	113754.	173.
0. TO 100000.	99427.	81240.	91661.	549967.	7658.	6.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	273.	2841.	1830.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	2.	55.	3.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	16.	249.	51.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	3775.	59089.	12089.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	23.	259.	140.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	7.	982.	150.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	39.	6.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	220.	9146.	1381.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	1.	81.	12.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 282
TOTAL NUMBER OF MANUFACTURING PLANTS... 208

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	8500.	125.	872.	181469.	1259.
FLOW (MGY)	11776.	57.	771.	160341.	1256.
TOTAL CAPITAL COST	10062441.	263268.	1160594.	241403584.	1085103.
TOTAL ANNUAL OGM COST	555945.	6894.	47582.	9897118.	58283.
TOTAL ANNUAL COST	1833873.	40329.	194975.	40554864.	195734.

ANNUAL COST OF WASTE TREATMENT

OGM	REPLACEMENT	INTEREST	TOTAL
9897118.	12070178.	18588064.	40555360.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	555945.	555945.	555945.	555945.	0.	1.
100000. TO 500000.	246412.	107380.	152089.	3802213.	40046.	25.
50000. TO 100000.	99106.	50076.	68830.	2271398.	14318.	33.
10000. TO 50000.	47115.	10021.	22875.	3179641.	9265.	139.
0. TO 10000.	9853.	6894.	8793.	87934.	870.	10.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	12578051.	5069775.	8163392.	24490176.	3833926.	3.
1000000. TO 5000000.	4956188.	1012700.	2106891.	202261616.	1069794.	96.
500000. TO 1000000.	987918.	506701.	737852.	67144560.	125467.	91.
100000. TO 500000.	495109.	329085.	436582.	7858479.	41229.	18.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	861.	1313.	2576.	0.	2755.	0.	2558.	0.	0.	0.	0.
MIN	0.	14.	43.	12.	0.	124.	0.	71.	0.	0.	0.	0.
AVE	0.	83.	174.	147.	0.	436.	0.	320.	0.	0.	0.	0.
TOT	0.	17367.	36163.	30601.	0.	90664.	0.	66607.	0.	0.	0.	0.
SD	0.	92.	147.	245.	0.	321.	0.	287.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL OGM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	9.	113.	90.	0.	288.	0.	66.	0.	0.	0.	0.
MIN	0.	1.	1.	1.	0.	3.	0.	1.	0.	0.	0.	0.
AVE	0.	2.	9.	6.	0.	25.	0.	6.	0.	0.	0.	0.
TOT	0.	320.	1785.	1228.	0.	5229.	0.	1335.	0.	0.	0.	0.
SD	0.	1.	12.	8.	0.	11.	0.	7.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 283
TOTAL NUMBER OF MANUFACTURING PLANTS... 97

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10700.	212.	1082.	104929.	1578.
FLOW (MGY)	1199.	16.	166.	16126.	241.
TOTAL CAPITAL COST	1267232.	81144.	298200.	28925424.	254412.
TOTAL ANNUAL O&M COST	84012.	2865.	14325.	1389514.	16268.
TOTAL ANNUAL COST	241415.	13820.	52196.	5063054.	48409.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1389514.	1446271.	2227256.	5063041.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	84012.	60749.	73101.	365505.	9737.	5.
10000. TO 50000.	39826.	10517.	19180.	690497.	8915.	36.
0. TO 10000.	9934.	2865.	5955.	333522.	1915.	56.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1584040.	1022296.	1354567.	8127406.	204988.	6.
500000. TO 1000000.	894368.	563122.	742097.	8163066.	106567.	11.
100000. TO 500000.	496098.	1 1430.	248332.	19866592.	104469.	80.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	47.	0.	225.	0.	407.	0.	553.	35.	0.	0.	0.
MIN	0.	2.	0.	3.	0.	38.	0.	36.	2.	0.	0.	0.
AVE	0.	9.	0.	32.	0.	116.	0.	133.	8.	0.	0.	0.
TOT	0.	921.	0.	3070.	0.	11236.	0.	12919.	780.	0.	0.	0.
SD	0.	10.	0.	45.	0.	82.	0.	112.	7.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	7.	0.	17.	0.	34.	0.	18.	13.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	0.	3.	.	6.	0.	4.	2.	0.	0.	0.
TOT	0.	58.	0.	243.	0.	534.	0.	366.	188.	0.	0.	0.
SD	0.	0.	0.	3.	0.	7.	0.	3.	3.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 284
TOTAL NUMBER OF MANUFACTURING PLANTS... 105

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4000.	38.	514.	53930.	540.
FLOW (MGY)	443.	5.	50.	5270.	62.
TOTAL CAPITAL COST	126510.	8881.	28735.	3017144.	19398.
TOTAL ANNUAL O&M COST	26439.	820.	4174.	438282.	3923.
TOTAL ANNUAL COST	42506.	1947.	7823.	821463.	6367.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
438282.	150657.	232320.	821459.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	26439.	10093.	15166.	106160.	5743.	7.
0. TO 10000.	9789.	820.	3389.	332122.	2262.	98.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	158138.	117897.	138018.	276035.	28455.	2.
0. TO 100000.	97853.	11101.	33936.	3495403.	19575.	103.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	22.	33.	0.	0.	71.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	4.	0.	0.	4.	0.	0.	0.	0.
AVE	0.	0.	0.	3.	11.	0.	0.	15.	0.	0.	0.	0.
TOT	0.	0.	0.	266.	1139.	0.	0.	1612.	0.	0.	0.	0.
SD	0.	0.	0.	3.	5.	0.	0.	11.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	3.	21.	0.	0.	3.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	0.	0.	3.	0.	0.	1.	0.	0.	0.	0.
TOT	0.	0.	0.	41.	313.	0.	0.	84.	0.	0.	0.	0.
SD	0.	0.	0.	0.	3.	0.	0.	0.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 285
TOTAL NUMBER OF MANUFACTURING PLANTS... 81

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28600.	150.	688.	55692.	3153.
FLOW (MGY)	4359.	21.	137.	11071.	483.
TOTAL CAPITAL COST	1479333.	42857.	117025.	9479046.	163157.
TOTAL ANNUAL O&M COST	282736.	2699.	12602.	1020760.	31418.
TOTAL ANNUAL COST	470611.	8142.	27464.	2224580.	52074.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1020760.	473552.	729886.	2224598.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	282736.	282736.	282736.	282736.	0.	1.
50000. TO 100000.	57576.	57576.	57576.	57576.	0.	1.
10000. TO 50000.	42387.	11053.	16599.	298778.	7540.	18.
0. TO 10000.	9728.	2699.	6257.	381671.	2091.	61.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1849166.	1849166.	1849166.	1849166.	0.	1.
500000. TO 1000000.	520809.	520809.	520809.	520809.	0.	1.
100000. TO 500000.	411694.	101020.	151106.	6648660.	55368.	44.
0. TO 100000.	97482.	53572.	80862.	2830183.	11951.	35.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	82.	1038.	359.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	2.	39.	2.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	5.	100.	12.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	421.	8091.	967.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	9.	115.	40.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	3.	243.	37.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	11.	2.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	44.	851.	126.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	27.	4.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 286
TOTAL NUMBER OF MANUFACTURING PLANTS... 23

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2000.	100.	376.	8654.	488.
FLOW (MGY)	1115.	27.	276.	6352.	258.
TOTAL CAPITAL COST	682948.	80621.	263546.	6061566.	159976.
TOTAL ANNUAL O&M COST	45759.	3828.	17319.	398327.	11971.
TOTAL ANNUAL COST	132494.	14066.	50789.	1168146.	32190.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
398327.	303078.	466740.	1168145.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	45759.	11184.	24790.	32 271.	10980.	13.
0. TO 10000.	9770.	3828.	7606.	76057.	2022.	10.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	853685.	533947.	642783.	3213917.	127958.	5.
100000. TO 500000.	493810.	100776.	242391.	4363045.	104862.	18.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	46.	203.	77.	46.	0.	0.	312.	0.	0.	0.	0.
MIN	0.	4.	28.	2.	11.	0.	0.	36.	0.	0.	0.	0.
AVE	0.	16.	83.	20.	23.	0.	0.	122.	0.	0.	0.	0.
TOT	0.	365.	1907.	462.	532.	0.	0.	2796.	0.	0.	0.	0.
SD	0.	11.	47.	18.	10.	0.	0.	74.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	1.	12.	5.	21.	0.	0.	7.	0.	0.	0.	0.
MIN	0.	0.	1.	0.	1.	0.	0.	1.	0.	0.	.	0.
AVE	0.	1.	4.	2.	8.	0.	0.	3.	0.	0.	0.	0.
TOT	0.	18.	99.	36.	175.	0.	0.	72.	0.	0.	0.	0.
SD	0.	0.	3.	1.	5.	0.	0.	2.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

[illegible] ... 207
[illegible] OF MANUFACTURING PLANTS... 106

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1900.	70.	248.	26328.	425.
FLOW (MGD)	15216.	106.	1019.	107992.	1789.
TOTAL CAPITAL COST	1769556.	99493.	2435594.	25821520.	199576.
TOTAL ANNUAL O&M COST	596023.	12448.	46643.	4944174.	65488.
TOTAL ANNUAL COST	818217.	25080.	77581.	8223534.	90580.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4944174.	1291075.	1988256.	8223505.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 600000.	596023.	596023.	596023.	596023.	0.	1.
200000. TO 600000.	277103.	113078.	171348.	856741.	71702.	5.
100000. TO 200000.	98445.	50024.	64424.	1481755.	14502.	23.
50000. TO 100000.	47301.	12448.	26100.	2009670.	8722.	77.
0. TO 50000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2136942.	1045030.	1508316.	4524944.	600641.	3.
500000. TO 1000000.	665367.	533776.	585804.	3511621.	50931.	6.
200000. TO 500000.	490012.	124366.	249899.	24240208.	84804.	97.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	0.	0.	830.	654.	144.	0.	81.	0.	0.	0.	0.	0.
[illegible]	0.	0.	50.	7.	17.	0.	25.	0.	0.	0.	0.	0.
[illegible]	0.	0.	131.	41.	36.	0.	36.	0.	0.	0.	0.	0.
[illegible]	0.	0.	19917.	4308.	3665.	0.	3847.	0.	0.	0.	0.	0.
[illegible]	0.	0.	103.	74.	17.	0.	8.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	0.	0.	198.	70.	313.	0.	15.	0.	0.	0.	0.	0.
[illegible]	0.	0.	3.	1.	7.	0.	1.	0.	0.	0.	0.	0.
[illegible]	0.	0.	15.	5.	26.	0.	2.	0.	0.	0.	0.	0.
[illegible]	0.	1.	1498.	508.	2712.	0.	225.	0.	0.	0.	0.	0.
[illegible]	0.	0.	22.	8.	35.	0.	2.	0.	0.	0.	0.	0.

[illegible] S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 209
TOTAL NUMBER OF MANUFACTURING PLANTS... 148

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20000.	9.	769.	113861.	2079.
FLOW (MGD)	21798.	40.	865.	128050.	2661.
TOTAL CAPITAL COST	5973824.	78678.	411839.	60952208.	706154.
TOTAL ANNUAL O&M COST	1230992.	5919.	55435.	8204405.	138543.
TOTAL ANNUAL COST	1989867.	15911.	107739.	15945426.	227756.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
8204405.	3047810.	4693317.	15945332.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
0 DOLLARS,	1230992.	646666.	888667.	2665985.	304811.	3.
500000. TO 1000000.	450986.	118726.	2 7528.	2282811.	113937.	11.
100000. TO 500000.	96685.	50187.	63794.	829325.	15223.	13.
10000. TO 50000.	49662.	10164.	22640.	2241335.	10016.	99.
0. TO 10000.	9842.	5919.	8408.	184977.	1089.	22.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
0 DOLLARS,	7667280.	5055837.	6261558.	12523117.	1705147.	2.
4000000. TO 5000000.	4136482.	1079896.	1940333.	23284000.	1037310.	12.
500000. TO 1000000.	966104.	502534.	595170.	12498577.	122664.	21.
100000. TO 500000.	489299.	120774.	248097.	27786896.	83742.	112.
0. TO 100000.	98347.	98347.	98347.	98347.	0.	1.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	499.	309.	2337.	1526.	103.	0.	0.	1204.	0.	0.	0.	0.
[illegible]	4.	2.	43.	3.	6.	0.	0.	19.	0.	0.	0.	0.
[illegible]	21.	14.	201.	55.	16.	0.	0.	99.	0.	0.	0.	0.
[illegible]	2936.	2816.	30030.	6127.	2368.	0.	0.	14676.	0.	0.	0.	0.
[illegible]	60.	37.	291.	169.	14.	0.	0.	150.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
[illegible]	81.	8.	767.	154.	161.	0.	0.	70.	0.	0.	0.	0.
[illegible]	4.	1.	9.	0.	1.	0.	0.	1.	0.	0.	0.	0.
[illegible]	4.	1.	32.	6.	8.	0.	0.	4.	0.	0.	0.	0.
[illegible]	541.	147.	4784.	805.	1173.	0.	0.	620.	0.	0.	0.	0.
[illegible]	4.	1.	86.	16.	18.	0.	0.	8.	0.	0.	0.	0.

[illegible] OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 29
TOTAL NUMBER OF MANUFACTURING PLANTS... 334

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10000.	27.	381.	127318.	876.
FLOW (MGD)	25451.	4.	938.	313161.	2611.
TOTAL CAPITAL COST	67004336.	26943.	2447213.	817369344.	6578128.
TOTAL ANNUAL O&M COST	1909998.	1645.	113944.	38057440.	226014.
TOTAL ANNUAL COST	10419946.	5067.	424752.	141867296.	1055533.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
38057440.	40868464.	62937408.	141863312.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1909998.	538860.	999636.	14994542.	407515.	15.
100000. TO 500000.	444436.	101038.	195117.	15609352.	86781.	80.
50000. TO 100000.	97150.	50142.	69541.	3963824.	13536.	57.
10000. TO 50000.	49756.	10113.	28326.	3115819.	12570.	110.
0. TO 10000.	9577.	1645.	5220.	375852.	2117.	72.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	83755408.	5063841.	16967392.	678696192.	18475008.	40.
1000000. TO 5000000.	4930840.	1013979.	2246030.	287491840.	1028432.	128.
500000. TO 1000000.	991593.	508609.	751910.	38347424.	139783.	51.
100000. TO 500000.	478823.	100476.	211395.	13740697.	103767.	65.
0. TO 100000.	98949.	33679.	69457.	3472851.	18665.	50.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
***	37601.	419.	2329.	1047.	31.	0.	0.	187.	0.	0.	0.	26321.
***	5.	0.	10.	0.	0.	0.	0.	0.	0.	0.	0.	150.
***	423.	28.	211.	41.	10.	0.	0.	37.	0.	0.	0.	2213.
***	258543.	9241.	70491.	13660.	985.	0.	0.	3804.	0.	0.	0.	511156.
**	3216.	51.	300.	112.	5.	0.	0.	29.	0.	0.	0.	3563.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
***	687.	7.	477.	62.	17.	0.	0.	7.	0.	0.	0.	881.
***	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.
***	28.	1.	24.	3.	2.	0.	0.	2.	0.	0.	0.	82.
***	9245.	337.	8023.	1027.	293.	0.	0.	160.	0.	0.	0.	19013.
**	57.	1.	54.	7.	3.	0.	0.	1.	0.	0.	0.	122.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1969 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 293
TOTAL NUMBER OF MANUFACTURING PLANTS... 231

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10000.	35.	470.	108587.	1028.
FLOW (MGD)	25451.	32.	1325.	306146.	3062.
TOTAL CAPITAL COST	67004336.	208226.	3492545.	806778112.	7686978.
TOTAL ANNUAL O&M COST	1909998.	10333.	160663.	37113136.	258488.
TOTAL ANNUAL COST	10419546.	36984.	604226.	139576224.	1228045.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
37113136.	40338896.	62121872.	139573904.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1909998.	538860.	999636.	14994542.	407515.	15.
100000. TO 500000.	444436.	101038.	195117.	15609352.	86781.	80.
50000. TO 100000.	97150.	50142.	69917.	3845436.	13629.	55.
10000. TO 50000.	45756.	10333.	32901.	2664957.	11050.	81.
0. TO 10000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	83759408.	5063841.	16967392.	678696192.	18475008.	40.
1000000. TO 5000000.	4910840.	1013979.	2246030.	287491840.	1028432.	128.
500000. TO 1000000.	991593.	538609.	758677.	37175168.	138253.	49.
100000. TO 500000.	478823.	260283.	366490.	5130860.	64113.	14.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MEA	37601.	619.	2325.	1047.	3.	0.	0.	0.	0.	0.	0.	26321.
MIN	14.	1.	40.	2.	0.	0.	0.	0.	0.	0.	0.	150.
SUM	890.	38.	287.	58.	0.	0.	0.	0.	0.	0.	0.	2213.
TOT	207051.	8893.	66230.	13450.	0.	0.	0.	0.	0.	0.	0.	511156.
SD	3831.	58.	334.	131.	0.	0.	0.	0.	0.	0.	0.	3563.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MEA	682.	7.	477.	62.	0.	0.	0.	0.	0.	0.	0.	881.
MIN	2.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	6.
SUM	39.	1.	34.	4.	0.	0.	0.	0.	0.	0.	0.	82.
TOT	9684.	291.	7752.	994.	0.	0.	0.	0.	0.	0.	0.	19013.
SD	65.	1.	62.	8.	0.	0.	0.	0.	0.	0.	0.	122.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 30
TOTAL NUMBER OF MANUFACTURING PLANTS... 459

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20000.	45.	663.	304302.	1295.
FLOW (MGD)	4031.	3.	105.	48037.	244.
TOTAL CAPITAL COST	2142840.	21613.	180667.	82926224.	160553.
TOTAL ANNUAL O&M COST	244611.	915.	10886.	4996516.	16064.
TOTAL ANNUAL COST	916751.	3660.	33831.	15528579.	36255.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4996516.	4146310.	6385316.	15528142.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 900000.	0.	0.	0.	0.	0.	0.
100000. TO 900000.	244611.	126883.	167660.	502980.	66681.	3.
90000. TO 100000.	74894.	54477.	65099.	260395.	9256.	4.
10000. TO 90000.	45179.	10041.	17443.	2250193.	8512.	129.
0. TO 10000.	9930.	915.	6140.	1983061.	2126.	323.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 9000000.	0.	0.	0.	0.	0.	0.
1000000. TO 9000000.	2678550.	1030465.	1738926.	6955707.	686185.	4.
900000. TO 1000000.	994919.	511706.	666549.	12664428.	156202.	19.
150000. TO 900000.	486637.	100289.	206742.	80215856.	81490.	388.
0. TO 100000.	99938.	27016.	79656.	3823471.	16886.	48.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
***	0.	162.	318.	292.	0.	775.	0.	596.	0.	0.	0.	0.
***	0.	1.	4.	0.	0.	12.	0.	5.	0.	0.	0.	0.
***	0.	9.	30.	8.	0.	86.	0.	48.	0.	0.	0.	0.
***	0.	4196.	13567.	3584.	0.	39456.	0.	22084.	0.	0.	0.	0.
***	0.	11.	29.	18.	0.	63.	0.	45.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
***	0.	9.	47.	33.	0.	130.	0.	29.	0.	0.	0.	0.
***	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
***	0.	1.	2.	1.	0.	5.	0.	2.	0.	0.	0.	0.
***	0.	327.	768.	503.	0.	2482.	0.	917.	0.	0.	0.	0.
***	0.	0.	3.	2.	0.	9.	0.	2.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 28
TOTAL NUMBER OF MANUFACTURING PLANTS... 215

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3700.	40.	476.	102307.	504.
FLOW (MGY)	6349.	6.	237.	50927.	505.
TOTAL CAPITAL COST	2593192.	12165.	402392.	86514336.	465301.
TOTAL ANNUAL O&M COST	214222.	1061.	19960.	4291402.	26325.
TOTAL ANNUAL COST	456758.	2606.	71065.	15278901.	82444.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4291402.	4325716.	6661600.	15278718.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	214222.	114131.	150792.	603166.	43870.	4.
50000. TO 100000.	94026.	50403.	67584.	1013757.	12944.	15.
10000. TO 50000.	46835.	10076.	22632.	2444260.	9693.	108.
0. TO 10000.	9739.	1061.	2617.	230268.	2152.	88.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3191490.	1012275.	1525676.	54924336.	580238.	36.
500000. TO 1000000.	965007.	517147.	693436.	36058672.	126243.	52.
100000. TO 500000.	494153.	109181.	314806.	14795888.	119670.	47.
0. TO 100000.	61739.	15206.	29569.	2365488.	9246.	80.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	279.	1057.	609.	99.	0.	0.	720.	0.	0.	0.	0.
MIN	0.	22.	127.	21.	0.	0.	0.	8.	0.	0.	0.	0.
AVE	0.	74.	344.	114.	14.	0.	0.	123.	0.	0.	0.	0.
TOT	0.	8192.	37789.	12576.	1433.	0.	0.	26524.	0.	0.	0.	0.
SD	0.	50.	185.	108.	14.	0.	0.	121.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4.	101.	24.	175.	0.	0.	39.	0.	0.	0.	0.
MIN	0.	1.	5.	1.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	21.	5.	7.	0.	0.	3.	0.	0.	0.	0.
TOT	0.	160.	2299.	534.	721.	0.	0.	618.	0.	0.	0.	0.
SD	0.	1.	18.	4.	19.	0.	0.	3.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 331
TOTAL NUMBER OF MANUFACTURING PLANTS... 110

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1500.	60.	189.	20762.	184.
FLOW (MGD)	1983.	55.	286.	31430.	283.
TOTAL CAPITAL COST	2593192.	238092.	723760.	79615760.	448952.
TOTAL ANNUAL O&M COST	142311.	8143.	30429.	3347194.	24946.
TOTAL ANNUAL COST	456758.	36793.	122350.	13458456.	81740.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
3347194.	3980787.	6130410.	13458391.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	142311.	114131.	129648.	388944.	14305.	3.
50000. TO 100000.	94026.	50403.	68613.	891968.	13036.	13.
10000. TO 50000.	46839.	10107.	22864.	2012053.	10233.	88.
0. TO 10000.	9739.	8143.	9040.	54239.	676.	6.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3191490.	1012275.	1540049.	53901728.	582170.	35.
500000. TO 1000000.	965007.	517147.	693436.	36058672.	126243.	52.
100000. TO 500000.	477357.	297564.	415638.	9559665.	43183.	23.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MEAN	0.	279.	1057.	609.	0.	0.	0.	608.	0.	0.	0.	0.
MEDIAN	0.	27.	127.	21.	0.	0.	0.	68.	0.	0.	0.	0.
S.D.	0.	76.	344.	114.	0.	0.	0.	191.	0.	0.	0.	0.
TOT	0.	8192.	37789.	12576.	0.	0.	0.	21059.	0.	0.	0.	0.
NO	0.	30.	185.	108.	0.	0.	0.	107.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MEAN	0.	4.	101.	24.	0.	0.	0.	13.	0.	0.	0.	0.
MEDIAN	0.	1.	5.	1.	0.	0.	0.	1.	0.	0.	0.	0.
S.D.	0.	1.	21.	5.	0.	0.	0.	4.	0.	0.	0.	0.
TOT	0.	160.	2259.	534.	0.	0.	0.	394.	0.	0.	0.	0.
NO	0.	1.	18.	4.	0.	0.	0.	2.	0.	0.	0.	0.

NO OF S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 32
TOTAL NUMBER OF MANUFACTURING PLANTS... 945

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	8000.	50.	345.	325708.	586.
FLOW (MGY)	5890.	5.	201.	190163.	463.
TOTAL CAPITAL COST	2161563.	20021.	165661.	156549696.	200408.
TOTAL ANNUAL O&M COST	486195.	888.	18310.	17303312.	34082.
TOTAL ANNUAL COST	760714.	3456.	39347.	37183072.	59219.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
17303312.	7827484.	12054320.	37185104.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 900000.	0.	0.	0.	0.	0.	0.
100000. TO 900000.	486195.	102218.	179255.	4839883.	87872.	27.
90000. TO 100000.	99501.	51634.	70858.	1771442.	14038.	25.
10000. TO 90000.	49855.	10045.	19705.	8414072.	9036.	427.
0. TO 10000.	9944.	888.	4889.	2278181.	2596.	466.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 9000000.	0.	0.	0.	0.	0.	0.
1000000. TO 9000000.	2701953.	1004533.	1503717.	31578064.	477855.	21.
900000. TO 1000000.	984544.	505899.	707054.	22625728.	158329.	32.
100000. TO 900000.	497099.	100554.	200278.	124973664.	87428.	624.
0. TO 100000.	99243.	25026.	61618.	16513613.	22177.	268.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MEAN	0.	0.	1320.	841.	0.	256.	0.	0.	0.	0.	0.	0.
MED	0.	0.	17.	1.	0.	13.	0.	0.	0.	0.	0.	0.
AVG	0.	0.	126.	29.	0.	57.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	118835.	27149.	0.	10566.	0.	0.	0.	0.	0.	0.
SD	0.	0.	131.	66.	0.	48.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MEAN	0.	0.	391.	95.	0.	31.	0.	0.	0.	0.	0.	0.
MED	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVG	0.	0.	14.	3.	0.	3.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	13934.	3193.	0.	576.	0.	0.	0.	0.	0.	0.
SD	0.	0.	27.	7.	0.	5.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 371
TOTAL NUMBER OF MANUFACTURING PLANTS... 23

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3000.	250.	931.	21408.	705.
FLOW (MGY)	1419.	122.	466.	10724.	340.
TOTAL CAPITAL COST	1042689.	203182.	451829.	10392060.	213239.
TOTAL ANNUAL O&M COST	156321.	16177.	52775.	1213822.	33474.
TOTAL ANNUAL COST	288743.	41981.	110157.	2533610.	60461.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1213822.	519603.	800188.	2533612.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 900000.	0.	0.	0.	0.	0.	0.
100000. TO 900000.	156321.	156321.	156321.	156321.	0.	1.
50000. TO 100000.	95850.	52885.	76810.	614484.	13409.	8.
10000. TO 50000.	49265.	16177.	31644.	443020.	11759.	14.
0. TO 10000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 9000000.	0.	0.	0.	0.	0.	0.
1000000. TO 9000000.	1303361.	1303361.	1303361.	1303361.	0.	1.
400000. TO 1000000.	962863.	505899.	707905.	7786950.	158286.	11.
100000. TO 900000.	469354.	253977.	354524.	3899766.	74431.	11.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	540.	207.	0.	256.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	113.	17.	0.	72.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	243.	65.	0.	143.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	9990.	1500.	0.	3293.	0.	0.	0.	0.	0.	0.
SD	0.	0.	109.	47.	0.	58.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	101.	24.	0.	31.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	10.	2.	0.	4.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	34.	8.	0.	11.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	776.	185.	0.	254.	0.	0.	0.	0.	0.	0.
SD	0.	0.	22.	5.	0.	7.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 322
TOTAL NUMBER OF MANUFACTURING PLANTS... 125

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	8000.	170.	766.	95739.	969.
FLOW (MGY)	1449.	5.	67.	8316.	143.
TOTAL CAPITAL COST	974138.	30675.	121101.	15137577.	109486.
TOTAL ANNUAL O&M COST	144238.	888.	8835.	1104397.	14523.
TOTAL ANNUAL COST	267953.	4784.	24215.	3026848.	28210.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1104397.	756879.	1165592.	3026867.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	144238.	144238.	144238.	144238.	0.	1.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	49083.	10143.	18892.	528963.	10213.	28.
0. TO 10000.	9520.	888.	4492.	431199.	1944.	96.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 9000000.	0.	0.	0.	0.	0.	0.
1000000. TO 9000000.	1217673.	1217673.	1217673.	1217673.	0.	1.
500000. TO 1000000.	645060.	645060.	645060.	645060.	0.	1.
100000. TO 500000.	468135.	101048.	177049.	13455749.	90742.	76.
0. TO 100000.	99243.	38343.	76670.	3603498.	16040.	47.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	504.	194.	0.	276.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	17.	1.	0.	13.	0.	0.	0.	0.	0.	0.
AVG	0.	0.	68.	10.	0.	44.	0.	0.	0.	0.	0.	0.
TOT	0.	3.	8438.	1201.	0.	5498.	0.	0.	0.	0.	0.	0.
SD	0.	0.	58.	20.	0.	33.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	93.	22.	0.	29.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVG	0.	0.	6.	1.	0.	2.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	696.	160.	0.	248.	0.	0.	0.	0.	0.	0.
SD	0.	0.	9.	2.	0.	3.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 323
TOTAL NUMBER OF MANUFACTURING PLANTS... 36

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1100.	102.	259.	9333.	199.
FLOW (MGY)	285.	14.	60.	2146.	49.
TOTAL CAPITAL COST	367211.	55831.	133335.	4800056.	60496.
TOTAL ANNUAL O&M COST	41773.	2618.	8967.	322817.	7150.
TOTAL ANNUAL COST	88408.	9709.	25901.	932425.	14693.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
322817.	240003.	369604.	932423.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	41773.	10207.	16582.	182397.	9010.	11.
0. TO 10000.	9299.	2618.	5617.	140420.	1572.	25.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	459014.	1 2873.	174028.	5742917.	74649.	33.
0. TO 100000.	94142.	69788.	85717.	257151.	13802.	3.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	202.	43.	0.	123.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	32.	2.	0.	22.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	79.	9.	0.	49.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	2694.	332.	0.	1774.	0.	0.	0.	0.	0.	0.
SD	0.	0.	33.	8.	0.	20.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	27.	6.	0.	9.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	6.	1.	0.	2.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	202.	46.	0.	74.	0.	0.	0.	0.	0.	0.
SD	0.	0.	5.	1.	0.	2.	0.	0.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 324
TOTAL NUMBER OF MANUFACTURING PLANTS... 149

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1000.	75.	197.	29415.	135.
FLOW (MGY)	1029.	44.	177.	26312.	124.
TOTAL CAPITAL COST	996276.	68417.	163508.	24362640.	75500.
TOTAL ANNUAL O&M COST	102218.	5272.	17389.	2590972.	11611.
TOTAL ANNUAL COST	177945.	13995.	38155.	5685071.	21026.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2590972.	1218131.	1875922.	5685025.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	102218.	102218.	102218.	102218.	0.	1.
50000. TO 100000.	98202.	52982.	55603.	166809.	2611.	3.
10000. TO 50300.	44733.	10058.	18286.	2084650.	6835.	114.
0. TO 10000.	9740.	5272.	7655.	237308.	1341.	31.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	745345.	519617.	632481.	1264961.	159617.	2.
100000. TO 500000.	497099.	100554.	202283.	28724240.	78244.	142.
0. TO 100000.	97600.	85521.	92836.	464181.	5509.	5.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
AVE	0.	0.	445.	152.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	62.	6.	0.	0.	0.	0.	0.	0.	0.	0.
AVF	0.	0.	138.	26.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	2055*.	3804.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	57.	19.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
AVE	0.	0.	82.	20.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVF	0.	0.	14.	3.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	2100.	491.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	9.	2.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 329
TOTAL NUMBER OF MANUFACTURING PLANTS... 77

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2000.	13C.	300.	23100.	280.
FLOW (MGY)	78.	6.	17.	1289.	13.
TOTAL CAPITAL COST	108154.	20021.	35368.	2723357.	15748.
TOTAL ANNUAL O&M COST	8604.	907.	2079.	160117.	1391.
TOTAL ANNUAL COST	21593.	3456.	6571.	505985.	3373.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
160117.	136168.	209698.	505983.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	0.	0.	0.	0.	0.	0.
0. TO 10000.	8604.	907.	2079.	160117.	1391.	77.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	135153.	104465.	121789.	365366.	15735.	3.
0. TO 100000.	76396.	25026.	41065.	3038839.	11601.	74.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	9.	12.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVG	0.	0.	3.	2.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	5.	253.	199.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVG	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	13.	21.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 328
TOTAL NUMBER OF MANUFACTURING PLANTS... 47

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1500.	80.	433.	20364.	407.
FLOW (MGY)	112.	6.	27.	1264.	23.
TOTAL CAPITAL COST	117348.	20768.	47680.	2240952.	24959.
TOTAL ANNUAL O&M COST	12236.	903.	3351.	157478.	2561.
TOTAL ANNUAL COST	27141.	3601.	9406.	442079.	5701.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
157478.	112068.	172583.	442078.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	12236.	12236.	12236.	12236.	0.	1.
0. TO 10000.	9397.	903.	3357.	145242.	2216.	46.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	148710.	130749.	118240.	827677.	15247.	7.
0. TO 100000.	98961.	25960.	49338.	1973516.	19676.	40.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	102.	15.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	21.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	44.	4.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	2052.	189.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	22.	3.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	10.	2.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	129.	29.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.

SD ON S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 327
TOTAL NUMBER OF MANUFACTURING PLANTS... 290

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	700.	50.	148.	41376.	102.
FLOW (MGY)	1711.	12.	169.	47423.	157.
TOTAL CAPITAL COST	787635.	30360.	153229.	42904000.	88207.
TOTAL ANNUAL O&M COST	106175.	1697.	16221.	4541745.	12450.
TOTAL ANNUAL COST	206204.	5553.	35681.	9990720.	23553.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4541745.	2145199.	3303606.	9990550.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	106175.	106175.	106175.	106175.	0.	1.
50000. TO 100000.	65180.	51634.	58748.	293738.	6572.	5.
10000. TO 50000.	49855.	10188.	19505.	3508915.	8860.	184.
0. TO 10000.	9941.	1697.	6144.	552955.	2251.	90.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	984544.	512990.	633403.	3167014.	197361.	5.
100000. TO 500000.	477886.	101706.	207524.	46900352.	81555.	226.
0. TO 100000.	97768.	37950.	72721.	3563324.	16837.	49.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	559.	229.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	29.	2.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	129.	24.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	36153.	6751.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	67.	22.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	86.	21.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	13.	3.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	3680.	861.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	10.	2.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 328
TOTAL NUMBER OF MANUFACTURING PLANTS... 38

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	500.	54.	139.	5272.	101.
FLOW (MGY)	451.	22.	115.	4363.	96.
TOTAL CAPITAL COST	293234.	44744.	118417.	4499835.	59271.
TOTAL ANNUAL O&M COST	28768.	2406.	10136.	385172.	6506.
TOTAL ANNUAL COST	66008.	8089.	25175.	956651.	13986.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
385172.	224992.	346487.	956650.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	0.	0.	0.	0.	0.	0.
10000. TO 50000.	28768.	10482.	16648.	233069.	6399.	14.
0. TO 10000.	9944.	2406.	6338.	152102.	2020.	24.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	366543.	103708.	169338.	4910813.	72392.	29.
0. TO 100000.	86472.	55930.	79332.	713985.	9496.	9.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	234.	59.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	41.	3.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	102.	16.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	3883.	617.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	46.	13.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	23.	6.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	8.	2.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	313.	72.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 329
TOTAL NUMBER OF MANUFACTURING PLANTS... 170

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	6800.	50.	469.	79701.	864.
FLOW (MGY)	5890.	10.	520.	88336.	976.
TOTAL CAPITAL COST	2161563.	26837.	291136.	49493152.	385943.
TOTAL ANNUAL O&M COST	486195.	1317.	40160.	6827143.	69710.
TOTAL ANNUAL COST	760714.	4726.	77134.	13112857.	118280.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
6827143.	2474657.	3810970.	13112770.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	486195.	107207.	188301.	4330934.	91911.	23.
50000. TO 100000.	99501.	59515.	77379.	696415.	12178.	9.
10000. TO 50000.	46055.	10045.	21982.	1340903.	10265.	61.
0. TO 10000.	9905.	1317.	5960.	458937.	2447.	77.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2701953.	1004533.	1529317.	29057040.	496235.	19.
500000. TO 1000000.	963057.	522947.	750906.	9761783.	152240.	13.
100000. TO 500000.	471056.	111564.	207723.	20149088.	100350.	97.
0. TO 100000.	97927.	33546.	70711.	2899165.	17734.	41.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	1320.	841.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	25.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	217.	74.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	36926.	12567.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	249.	139.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	391.	95.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	32.	8.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	5508.	1319.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	56.	14.	0.	0.	0.	0.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 33
TOTAL NUMBER OF MANUFACTURING PLANTS... 1137

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28000.	10.	902.	1025720.	2033.
FLOW (MGY)	50279.	3.	1195.	1358716.	4448.
TOTAL CAPITAL COST	50768256.	16809.	958502.	1089817088.	3711356.
TOTAL ANNUAL O&M COST	3813776.	776.	100851.	114668048.	344438.
TOTAL ANNUAL COST	10261343.	2911.	222596.	253091872.	807731.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
114668048.	54490848.	83915872.	253074768.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3813776.	504294.	1411814.	70590704.	888968.	50.
100000. TO 500000.	489468.	100160.	206487.	29734112.	92952.	144.
50000. TO 100000.	99293.	50490.	73014.	5403023.	14500.	74.
10000. TO 50000.	49334.	10112.	21016.	6115701.	10298.	291.
0. TO 10000.	9943.	776.	4900.	2832163.	2233.	578.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	63460320.	5044770.	15857046.	887994624.	14289856.	56.
1000000. TO 5000000.	4591495.	1003880.	2032356.	280465152.	963843.	138.
500000. TO 1000000.	977830.	519026.	726846.	61781872.	137837.	85.
100000. TO 500000.	498863.	100581.	201375.	110353392.	97223.	548.
0. TO 100000.	99679.	21011.	70406.	21825824.	19236.	310.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	37230.	1448.	5265.	5278.	0.	836.	0.	1548.	0.	10781.	0.	0.
MIN	6.	1.	14.	0.	0.	0.	0.	31.	0.	0.	0.	0.
AVE	1192.	52.	319.	123.	0.	66.	0.	284.	0.	4173.	0.	0.
TOT	408688.	57191.	291402.	140179.	0.	47392.	0.	57364.	0.	87640.	0.	0.
SD	4324.	146.	613.	455.	0.	65.	0.	303.	0.	2591.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	797.	36.	2428.	452.	0.	153.	0.	100.	0.	15.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	64.	2.	77.	12.	0.	4.	0.	13.	0.	7.	0.	0.
TOT	21951.	2003.	70777.	14130.	0.	2930.	0.	2726.	0.	151.	0.	0.
SD	126.	4.	240.	41.	0.	9.	0.	18.	0.	4.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 331
TOTAL NUMBER OF MANUFACTURING PLANTS... 343

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28000.	75.	1582.	542783.	3291.
FLOW (MGY)	50279.	5.	3230.	1107894.	7596.
TOTAL CAPITAL COST	50768256.	26818.	2430643.	833642240.	6368490.
TOTAL ANNUAL O&M COST	3813776.	1642.	279978.	96032624.	583497.
TOTAL ANNUAL COST	10261343.	5048.	588657.	201909488.	1382915.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
96032624.	41682096.	64190416.	201905136.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3813776.	504294.	1420428.	69600992.	896069.	49.
100000. TO 500000.	489468.	101268.	272168.	21105984.	100292.	95.
50000. TO 100000.	99293.	50767.	75021.	3000836.	13139.	40.
10000. TO 50000.	49093.	10258.	23386.	1917669.	11819.	82.
0. TO 10000.	9908.	1642.	5313.	409109.	2254.	77.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	63460320.	5044770.	17572864.	790779136.	15405579.	45.
1000000. TO 5000000.	4477290.	1019747.	2050929.	188685552.	932636.	92.
500000. TO 1000000.	977747.	528419.	744929.	37246432.	130983.	50.
100000. TO 500000.	489636.	101760.	225064.	20930960.	110070.	93.
0. TO 100000.	98037.	33522.	70568.	4445781.	18376.	63.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	37230.	1448.	5265.	5278.	0.	0.	0.	1548.	0.	0.	0.	0.
MIN	6.	1.	19.	1.	0.	0.	0.	31.	0.	0.	0.	0.
AVE	1192.	133.	607.	332.	0.	0.	0.	284.	0.	0.	0.	0.
TOT	408688.	45562.	208284.	113742.	0.	0.	0.	97364.	0.	0.	0.	0.
SD	4324.	237.	900.	777.	0.	0.	0.	303.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	797.	36.	2428.	452.	0.	0.	0.	100.	0.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	64.	4.	172.	32.	0.	0.	0.	13.	0.	0.	0.	0.
TOT	21951.	1332.	59002.	11021.	0.	0.	0.	2726.	0.	0.	0.	0.
SD	126.	6.	368.	69.	0.	0.	0.	18.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 3312
TOTAL NUMBER OF MANUFACTURING PLANTS... 202

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28000.	180.	2420.	488906.	4063.
FLOW (MGY)	50279.	107.	5423.	1095389.	9295.
TOTAL CAPITAL COST	50768256.	193179.	4045423.	817175552.	7913614.
TOTAL ANNUAL O&M COST	3813776.	20406.	466212.	94174832.	703060.
TOTAL ANNUAL COST	10261343.	44939.	979991.	197958240.	1696763.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
94174832.	40858768.	62922480.	197956080.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3813776.	504294.	1420428.	69600992.	896069.	49.
100000. TO 500000.	489468.	101268.	222557.	20920384.	100758.	94.
50000. TO 100000.	99293.	52008.	76106.	2892014.	12533.	38.
10000. TO 50000.	49053.	20406.	36298.	762262.	8176.	21.
0. TO 10000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	68537104.	5448349.	18978704.	854041856.	16638015.	45.
1000000. TO 5000000.	4835471.	1039591.	2150060.	208555904.	1018481.	97.
500000. TO 1000000.	997526.	502253.	754005.	35438240.	129437.	47.
100000. TO 500000.	480382.	260786.	397491.	5167385.	67357.	13.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	37230.	1448.	5265.	5278.	0.	0.	0.	1548.	0.	0.	0.	0.
MIN	19.	15.	115.	13.	0.	0.	0.	31.	0.	0.	0.	0.
AVE	2012.	220.	973.	556.	0.	0.	0.	284.	0.	0.	0.	0.
TOT	406472.	44424.	196553.	112366.	0.	0.	0.	57364.	0.	0.	0.	0.
SD	5492.	277.	1023.	950.	0.	0.	0.	303.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	797.	36.	2428.	452.	0.	0.	0.	100.	0.	0.	0.	0.
MIN	5.	1.	11.	2.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	106.	6.	287.	54.	0.	0.	0.	13.	0.	0.	0.	0.
TOT	21432.	1238.	57947.	10832.	0.	0.	0.	2726.	0.	0.	0.	0.
SD	150.	7.	445.	83.	0.	0.	0.	18.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 332
TOTAL NUMBER OF MANUFACTURING PLANTS... 223

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4590.	188.	545.	121497.	622.
FLOW (MGY)	1100.	3.	84.	18643.	146.
TOTAL CAPITAL COST	620163.	16805.	88834.	19810048.	72366.
TOTAL ANNUAL O&M COST	62415.	776.	6124.	1366483.	7957.
TOTAL ANNUAL COST	128476.	2911.	17410.	3882383.	17084.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1366483.	990502.	1525372.	3882357.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	62415.	54623.	58519.	117039.	5510.	2.
10000. TO 50000.	44002.	10194.	20570.	431980.	11258.	21.
0. TO 10000.	9112.	776.	4088.	817506.	1990.	200.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	650204.	625342.	637773.	1275545.	17610.	2.
100000. TO 500000.	498893.	100619.	162167.	14595068.	90529.	90.
0. TO 100000.	99679.	21011.	67882.	8892532.	20122.	131.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	61.	0.	81.	0.	378.	0.	0.	0.	0.	0.	0.
MIN	0.	1.	0.	0.	0.	16.	0.	0.	0.	0.	0.	0.
AVE	0.	8.	0.	6.	0.	75.	0.	0.	0.	0.	0.	0.
TOT	0.	1706.	0.	1375.	0.	16729.	0.	0.	0.	0.	0.	0.
SD	0.	8.	0.	11.	0.	54.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	3.	0.	11.	0.	48.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	0.	1.	0.	5.	0.	0.	0.	0.	0.	0.
TOT	0.	148.	0.	202.	0.	1016.	0.	0.	0.	0.	0.	0.
SD	0.	0.	0.	1.	0.	6.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 3321
TOTAL NUMBER OF MANUFACTURING PLANTS... 117

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4590.	200.	583.	68198.	792.
FLOW (MGY)	1100.	14.	126.	14719.	190.
TOTAL CAPITAL COST	520163.	39397.	115218.	13480468.	88406.
TOTAL ANNUAL O&M COST	62415.	1980.	8558.	1001294.	10208.
TOTAL ANNUAL COST	128476.	6984.	23190.	2713286.	21381.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1001294.	674023.	1037996.	2713312.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	62415.	54623.	58519.	117039.	5510.	2.
10000. TO 50000.	44062.	10333.	22245.	400417.	11327.	18.
0. TO 10000.	9112.	1980.	4988.	483839.	1691.	97.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	624196.	600328.	612262.	1224523.	16902.	2.
100000. TO 500000.	478937.	130622.	172601.	10528644.	100075.	61.
0. TO 100000.	99350.	47276.	81915.	4423415.	14834.	54.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	61.	0.	81.	0.	378.	0.	0.	0.	0.	0.	0.
MIN	0.	3.	0.	1.	0.	36.	0.	0.	0.	0.	0.	0.
AVE	0.	11.	0.	9.	0.	95.	0.	0.	0.	0.	0.	0.
TOT	0.	1229.	0.	1080.	0.	11171.	0.	0.	0.	0.	0.	0.
SD	0.	11.	0.	14.	0.	64.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	3.	0.	11.	0.	48.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	0.	1.	0.	6.	0.	0.	0.	0.	0.	0.
TOT	0.	91.	0.	155.	0.	756.	0.	0.	0.	0.	0.	0.
SD	0.	0.	0.	2.	0.	8.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 3331
TOTAL NUMBER OF MANUFACTURING PLANTS... 27

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	1870.	10.	728.	19654.	637.
FLOW (MGY)	3021.	19.	1239.	33443.	1034.
TOTAL CAPITAL COST	1688034.	48345.	703797.	19002512.	506120.
TOTAL ANNUAL O&M COST	242557.	3132.	102659.	2771793.	81902.
TOTAL ANNUAL COST	446121.	9774.	192041.	5185112.	145293.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2771793.	950126.	1463192.	5185110.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	242557.	100192.	161336.	2581373.	48463.	16.
50000. TO 100000.	71257.	71257.	71257.	71257.	0.	1.
10000. TO 50000.	30875.	13589.	19245.	96224.	7155.	5.
0. TO 10000.	8367.	3132.	4588.	22941.	2205.	5.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2194442.	1014376.	1462304.	20472256.	332594.	14.
500000. TO 1000000.	985601.	716740.	819261.	2457784.	145349.	3.
100000. TO 500000.	378175.	130083.	249670.	1498021.	82339.	6.
0. TO 100000.	74001.	62900.	68795.	275180.	4549.	4.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	243.	962.	484.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	5.	40.	3.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	100.	429.	175.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	2698.	11579.	4726.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	74.	286.	147.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	7.	190.	46.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	3.	80.	19.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	87.	2163.	522.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	2.	64.	16.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 3332
TOTAL NUMBER OF MANUFACTURING PLANTS... 8

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	520.	55.	267.	2138.	164.
FLOW (MGY)	971.	83.	394.	3152.	290.
TOTAL CAPITAL COST	554701.	94683.	276591.	2212725.	149386.
TOTAL ANNUAL O&M COST	80023.	7022.	35252.	282019.	23419.
TOTAL ANNUAL COST	150470.	19047.	70379.	563035.	42384.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
282019.	110636.	170380.	563035.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	80023.	80023.	80023.	80023.	0.	1.
10000. TO 50000.	45421.	14644.	32496.	194974.	14087.	6.
0. TO 10000.	7022.	7022.	7022.	7022.	0.	1.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	721111.	721111.	721111.	721111.	0.	1.
100000. TO 500000.	448421.	123088.	307918.	2155429.	138211.	7.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	416.	139.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	84.	11.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	221.	56.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	1765.	448.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	108.	41.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	65.	15.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	28.	7.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	228.	54.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	19.	5.	0.	0.	0.	0.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 3333
TOTAL NUMBER OF MANUFACTURING PLANTS... 15

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2500.	150.	677.	10150.	683.
FLOW (MGY)	2059.	124.	472.	7073.	502.
TOTAL CAPITAL COST	1020668.	117743.	304204.	4563067.	231269.
TOTAL ANNUAL O&M COST	169022.	11815.	41060.	615902.	39806.
TOTAL ANNUAL COST	298647.	26769.	79694.	1195412.	69070.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
615902.	228153.	351356.	1195411.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	169022.	169022.	169022.	169022.	0.	1.
50000. TO 100000.	78064.	51666.	60564.	181693.	15156.	3.
10000. TO 50000.	49049.	11815.	24108.	265188.	10232.	11.
0. TO 10000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1326867.	1326867.	1326867.	1326867.	0.	1.
500000. TO 1000000.	696649.	562959.	629804.	1259607.	94538.	2.
100000. TO 500000.	476017.	153065.	278793.	3345515.	102618.	12.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	710.	311.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	102.	16.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	237.	67.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	3562.	1001.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	156.	75.	0.	0.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	136.	33.	0.	0.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	10.	2.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	33.	8.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	497.	118.	0.	0.	0.	0.	0.	0.	0.	0.
SD	0.	0.	32.	8.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 3334
TOTAL NUMBER OF MANUFACTURING PLANTS... 21

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3500.	784.	1598.	33558.	787.
FLOW (MGY)	6997.	915.	2806.	58916.	1764.
TOTAL CAPITAL COST	12448729.	1866862.	4969214.	104353504.	2943535.
TOTAL ANNUAL OEM COST	313776.	59054.	138916.	2917233.	79499.
TOTAL ANNUAL COST	1894764.	296145.	770007.	16170144.	452500.

ANNUAL COST OF WASTE TREATMENT

OEM	REPLACEMENT	INTEREST	TOTAL
2917233.	5217674.	8035215.	16170122.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	313776.	130787.	195045.	2145494.	71862.	11.
50000. TO 100000.	98924.	59054.	77174.	771743.	14846.	10.
10000. TO 50000.	0.	0.	0.	0.	0.	0.
0. TO 10000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	16183338.	5611202.	9472491.	94724912.	3567672.	10.
1000000. TO 5000000.	4775151.	2426919.	3721330.	40934640.	710561.	11.
500000. TO 1000000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	1066.	602.	0.	0.	0.	0.	0.	10781.	0.	0.
MIN	0.	0.	312.	85.	0.	0.	0.	0.	0.	1470.	0.	0.
AVE	0.	0.	560.	236.	0.	0.	0.	0.	0.	4173.	0.	0.
TOT	0.	0.	11762.	4951.	0.	0.	0.	0.	0.	87640.	0.	0.
SD	0.	0.	209.	144.	0.	0.	0.	0.	0.	2591.	0.	0.

DISTRIBUTION OF ANNUAL OEM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	241.	58.	0.	0.	0.	0.	0.	15.	0.	0.
MIN	0.	0.	45.	11.	0.	0.	0.	0.	0.	4.	0.	0.
AVE	0.	0.	106.	26.	0.	0.	0.	0.	0.	7.	0.	0.
TOT	0.	0.	2228.	538.	0.	0.	0.	0.	0.	151.	0.	0.
SD	0.	0.	61.	15.	0.	0.	0.	0.	0.	4.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 34
TOTAL NUMBER OF MANUFACTURING PLANTS... 1037

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	14000.	54.	565.	586016.	875.
FLOW (MGY)	1896.	2.	77.	79555.	133.
TOTAL CAPITAL COST	1037925.	11417.	96313.	99876096.	86014.
TOTAL ANNUAL O&M COST	183095.	650.	9221.	9562277.	12771.
TOTAL ANNUAL COST	314911.	2154.	21451.	22245152.	23597.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
9562277.	4993804.	7690455.	22246528.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	183095.	102258.	139244.	556976.	34202.	4.
50000. TO 100000.	93799.	50475.	72368.	868420.	16189.	12.
10000. TO 50000.	49985.	10091.	16699.	4091371.	8115.	245.
0. TO 10000.	9967.	650.	5213.	4045590.	2513.	776.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1297405.	1079237.	1152616.	3457849.	125393.	3.
500000. TO 1000000.	881528.	519048.	658743.	8563661.	132322.	13.
100000. TO 500000.	470211.	100151.	155896.	80910128.	65311.	519.
0. TO 100000.	99908.	14272.	63580.	31917280.	23892.	502.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	100.	610.	302.	0.	0.	0.	0.	18.	0.	0.	0.
MIN	0.	1.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	8.	74.	12.	0.	0.	0.	0.	2.	0.	0.	0.
TOT	0.	8302.	76796.	12912.	0.	0.	0.	0.	1866.	0.	0.	0.
SD	0.	8.	56.	21.	0.	0.	0.	0.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4.	133.	37.	0.	0.	0.	0.	9.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	6.	2.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	704.	6653.	1785.	0.	0.	0.	0.	420.	0.	0.	0.
SD	0.	0.	9.	3.	0.	0.	0.	0.	1.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 35
TOTAL NUMBER OF MANUFACTURING PLANTS... 790

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36000.	9.	1260.	995341.	2275.
FLOW (MGY)	3502.	0.	90.	70995.	195.
TOTAL CAPITAL COST	1827862.	1721.	102103.	80661360.	115402.
TOTAL ANNUAL O&M COST	256551.	20.	10166.	8031240.	16359.
TOTAL ANNUAL COST	488689.	238.	23133.	18275296.	30946.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
8031240.	4033067.	6210921.	18275216.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	256551.	114339.	159416.	797080.	56349.	5.
50000. TO 100000.	88908.	51629.	68227.	614039.	12080.	9.
10000. TO 50000.	49773.	10004.	19584.	4014672.	9021.	205.
0. TO 10000.	9972.	20.	4563.	2605547.	2248.	571.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2284827.	1049113.	1436917.	5747671.	570249.	4.
500000. TO 1000000.	962313.	526739.	681512.	6133606.	128731.	9.
100000. TO 500000.	468212.	100437.	188874.	60250736.	85553.	319.
0. TO 100000.	99740.	2152.	62659.	28697808.	22694.	458.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	176.	1008.	615.	0.	0.	0.	0.	29.	0.	0.	0.
MIN	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	9.	77.	14.	0.	0.	0.	0.	2.	0.	0.	0.
TOT	0.	6804.	60940.	11419.	0.	0.	0.	0.	1497.	0.	0.	0.
SD	0.	11.	72.	32.	0.	0.	0.	0.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4.	187.	53.	0.	0.	0.	0.	12.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	7.	2.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	546.	5615.	1514.	0.	0.	0.	0.	356.	0.	0.	0.
SD	0.	0.	12.	3.	0.	0.	0.	0.	1.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 36
TOTAL NUMBER OF MANUFACTURING PLANTS... 817

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	22800.	60.	1535.	1254103.	2272.
FLOW (MGY)	4600.	8.	134.	109859.	269.
TOTAL CAPITAL COST	1928896.	26463.	138881.	113465760.	138511.
TOTAL ANNUAL OEM COST	370288.	1555.	14296.	11679501.	22979.
TOTAL ANNUAL COST	615258.	5054.	31932.	26088192.	40371.

ANNUAL COST OF WASTE TREATMENT

OEM	REPLACEMENT	INTEREST	TOTAL
11679501.	5673287.	8736859.	26089632.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	370288.	100996.	162464.	1787104.	88604.	11.
50000. TO 100000.	94245.	52879.	68579.	1028686.	12589.	15.
10000. TO 50000.	49894.	10001.	18949.	5949989.	8710.	314.
0. TO 10000.	9939.	1555.	6109.	2913796.	2033.	477.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2411120.	1052456.	1466815.	8800895.	597750.	6.
500000. TO 1000000.	951697.	533424.	711662.	14944901.	144722.	21.
100000. TO 500000.	497658.	100345.	184741.	98651952.	81903.	534.
0. TO 100000.	99972.	33078.	75927.	19437312.	15482.	256.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	184.	1026.	689.	0.	0.	0.	0.	30.	0.	0.	0.
MIN	0.	2.	23.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	12.	103.	22.	0.	0.	0.	0.	3.	0.	0.	0.
TOT	0.	9822.	83903.	17635.	0.	0.	0.	0.	2105.	0.	0.	0.
SD	0.	13.	83.	41.	0.	0.	0.	0.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL OEM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	6.	270.	76.	3.	0.	0.	0.	18.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	10.	3.	0.	0.	0.	0.	1.	0.	0.	0.
TOT	0.	660.	8252.	2240.	0.	0.	0.	0.	527.	0.	0.	0.
SD	0.	0.	17.	5.	0.	0.	0.	0.	1.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 37
TOTAL NUMBER OF MANUFACTURING PLANTS... 562

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	38000.	150.	1923.	1080478.	3843.
FLOW (MGY)	2374.	4.	147.	82337.	271.
TOTAL CAPITAL COST	1261523.	16197.	141922.	79760160.	159695.
TOTAL ANNUAL O&M COST	223489.	897.	16046.	9017878.	24791.
TOTAL ANNUAL COST	379374.	2954.	34069.	19146784.	44954.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
9017878.	3988007.	6141525.	19147408.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	223489.	100360.	139084.	1669012.	39275.	12.
50000. TO 100000.	99182.	51083.	69309.	1940662.	13819.	28.
10000. TO 50000.	48854.	10002.	19746.	3692427.	9599.	187.
0. TO 10000.	9956.	897.	5122.	1715866.	2380.	335.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1576903.	1142767.	1400844.	7004221.	175854.	5.
500000. TO 1000000.	992870.	522812.	703803.	21114096.	147009.	30.
100000. TO 500000.	498980.	100387.	196478.	55603200.	94776.	283.
0. TO 100000.	99985.	20246.	65498.	15981418.	21983.	244.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	122.	740.	378.	0.	0.	0.	0.	21.	0.	0.	0.
MIN	0.	1.	14.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	12.	103.	24.	0.	0.	0.	0.	3.	0.	0.	0.
TOT	0.	6979.	58007.	13305.	0.	0.	0.	0.	1469.	0.	0.	0.
SD	0.	16.	99.	44.	0.	0.	0.	0.	3.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4.	163.	46.	0.	0.	0.	0.	11.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	11.	3.	0.	0.	0.	0.	1.	0.	0.	0.
TOT	0.	478.	6388.	1742.	0.	0.	0.	0.	410.	0.	0.	0.
SD	0.	1.	18.	5.	0.	0.	0.	0.	1.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW OF MOST EFFICIENT WATER USE REGION USED THROUGHOUT
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 20
TOTAL NUMBER OF MANUFACTURING PLANTS... 4494

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5900.	3.	208.	924045.	325.
FLOW (MGY)	39050.	1.	92.	413987.	647.
TOTAL CAPITAL COST	21994304.	15208.	141675.	636688640.	432207.
TOTAL ANNUAL O&M COST	1665295.	614.	7386.	33193072.	30751.
TOTAL ANNUAL COST	4458571.	2593.	25383.	114070192.	85439.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
33193072.	31834416.	49024992.	114052480.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1665295.	1665295.	1665295.	1665295.	0.	1.
100000. TO 500000.	499293.	102934.	209811.	4406037.	110242.	21.
50000. TO 100000.	98575.	51216.	71054.	3197436.	15522.	45.
10000. TO 50000.	49802.	10016.	18884.	10782836.	9279.	571.
0. TO 10000.	9997.	614.	3411.	13152329.	2192.	3856.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	27492880.	5346841.	10415597.	62493584.	8463787.	6.
1000000. TO 5000000.	4353655.	1005675.	1736216.	130216208.	788965.	75.
500000. TO 1000000.	990714.	50060.	690711.	105678832.	136381.	153.
100000. TO 500000.	498515.	100030.	202315.	352230656.	92126.	1741.
0. TO 100000.	99965.	19010.	57753.	145479680.	21710.	2519.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	2347.	172.	10419.	60.	5464.	0.	3764.	25.	0.	0.	0.
MIN	0.	0.	0.	0.	7.	0.	0.	5.	1.	0.	0.	0.
AVE	0.	15.	23.	59.	15.	105.	0.	54.	3.	0.	0.	0.
TOT	0.	37766.	27152.	42608.	10822.	272451.	0.	243569.	2502.	0.	0.	0.
SD	0.	60.	15.	423.	7.	185.	0.	95.	3.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	28.	15.	359.	42.	1116.	0.	162.	8.	0.	0.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	1.	3.	4.	6.	0.	2.	1.	0.	0.	0.
TOT	0.	1687.	1296.	2337.	2709.	16715.	0.	8013.	445.	0.	0.	0.
SD	0.	1.	1.	15.	4.	27.	0.	3.	1.	0.	0.	0.

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* NATIONAL TOTALS *
*LOW OF MOST EFFICIENT WATER USE REGION USED THROUGHOUT
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 22
TOTAL NUMBER OF MANUFACTURING PLANTS... 1021

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	9000.	35.	537.	548467.	602.
FLOW (MGY)	2422.	10.	159.	161918.	195.
TOTAL CAPITAL COST	1307587.	41569.	206640.	210979424.	142996.
TOTAL ANNUAL O&M COST	77260.	1493.	8840.	9025367.	7362.
TOTAL ANNUAL COST	233269.	6998.	35079.	35815776.	25150.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
9025367.	10548970.	16245407.	35819728.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	77260.	51924.	64810.	259240.	12674.	4.
10000. TO 50000.	49752.	10046.	16584.	4660128.	7168.	281.
0. TO 10000.	9996.	1493.	5579.	4106072.	2093.	736.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1634483.	1007220.	1215650.	12156500.	223161.	10.
500000. TO 1000000.	960954.	502827.	650179.	42911840.	125243.	66.
100000. TO 500000.	497712.	100258.	235417.	201281424.	100138.	855.
0. TO 100000.	99870.	51962.	81966.	7376909.	12894.	90.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	40.	192.	165.	0.	648.	0.	494.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	22.	0.	12.	0.	0.	0.	0.
AVE	0.	5.	24.	8.	0.	118.	0.	72.	0.	0.	0.	0.
TOT	0.	2826.	18934.	6971.	0.	108287.	0.	73954.	0.	0.	0.	0.
SD	0.	5.	26.	13.	0.	82.	0.	55.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	1.	12.	7.	0.	58.	0.	13.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	1.	1.	0.	6.	0.	2.	0.	0.	0.	0.
TOT	0.	240.	832.	588.	0.	5292.	0.	2074.	0.	0.	0.	0.
SD	0.	0.	2.	1.	0.	6.	0.	1.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF MOST EFFICIENT WATER USE REGION USED THROUGHOUT
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 24
TOTAL NUMBER OF MANUFACTURING PLANTS... 405

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	14500.	75.	369.	149384.	774.
FLOW (MGY)	7138.	28.	221.	89627.	409.
TOTAL CAPITAL COST	2908433.	80532.	285855.	115771376.	212153.
TOTAL ANNUAL O&M COST	235249.	2150.	13116.	5312013.	15214.
TOTAL ANNUAL COST	604620.	12530.	49419.	20014656.	41995.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
5312013.	5788568.	8914391.	20014960.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	235249.	235249.	235249.	235249.	0.	1.
50000. TO 100000.	82270.	50092.	61082.	488658.	11675.	8.
10000. TO 50000.	48079.	10023.	17091.	3195966.	8079.	187.
0. TO 10000.	9970.	2150.	6661.	1392194.	2201.	209.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3635541.	1039375.	1478944.	14789440.	787362.	10.
500000. TO 1000000.	983634.	500791.	673431.	31651248.	130145.	47.
100000. TO 500000.	496428.	100665.	282397.	98274160.	90217.	348.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	752.	0.	1064.	0.	1073.	0.	0.	0.	0.
MIN	0.	0.	0.	3.	0.	48.	0.	29.	0.	0.	0.	0.
AVE	0.	0.	0.	26.	0.	150.	0.	110.	0.	0.	0.	0.
TOT	0.	0.	0.	10476.	0.	60853.	0.	44441.	0.	0.	0.	0.
SD	0.	0.	0.	45.	0.	89.	0.	81.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	49.	0.	145.	0.	41.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	2.	0.	8.	0.	3.	0.	0.	0.	0.
TOT	0.	0.	0.	858.	0.	3197.	0.	1257.	0.	0.	0.	0.
SD	0.	0.	0.	3.	0.	9.	0.	3.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF MOST EFFICIENT WATER USE REGION USED THROUGHOUT
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 26
TOTAL NUMBER OF MANUFACTURING PLANTS... 862

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4000.	12.	447.	385511.	540.
FLOW (MGY)	25089.	8.	1072.	923693.	2295.
TOTAL CAPITAL COST	1908968C.	22989.	833840.	718770432.	1601021.
TOTAL ANNUAL O&M COST	1142226.	771.	53973.	46524528.	109578.
TOTAL ANNUAL COST	3566614.	3767.	159885.	137821072.	311522.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
46524528.	35938512.	55345296.	137808336.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1142226.	513107.	714511.	9288647.	202131.	13.
100000. TO 500000.	471641.	101221.	200544.	19653312.	98413.	98.
50000. TO 100000.	99358.	50438.	71289.	7699183.	15088.	108.
10000. TO 50000.	49217.	10187.	26735.	8448124.	10506.	316.
0. TO 10000.	9929.	771.	4409.	1441588.	2234.	327.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	23862056.	5138215.	9340080.	298882560.	4358529.	32.
1000000. TO 5000000.	4921927.	1018279.	1907444.	371951616.	911433.	195.
500000. TO 1000000.	997460.	504180.	719261.	152483296.	133645.	212.
100000. TO 500000.	495107.	100205.	249394.	62597872.	124298.	251.
0. TO 100000.	99865.	28736.	73605.	12660053.	17017.	172.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	5642.	0.	2625.	0.	3775.	0.	0.	7048.	0.
MIN	0.	0.	0.	1.	0.	22.	0.	10.	0.	0.	1337.	0.
AVE	0.	0.	0.	168.	0.	331.	0.	313.	0.	0.	2731.	0.
TOT	0.	0.	0.	112538.	0.	285130.	0.	220115.	0.	0.	101049.	0.
SD	0.	0.	0.	445.	0.	338.	0.	394.	0.	0.	1291.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	162.	0.	413.	0.	112.	0.	0.	604.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	121.	0.
AVE	0.	0.	0.	9.	0.	28.	0.	9.	0.	0.	263.	0.
TOT	0.	0.	0.	5949.	0.	24426.	0.	6424.	0.	0.	9727.	0.
SD	0.	0.	0.	16.	0.	40.	0.	12.	0.	0.	123.	0.

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* NATIONAL TOTALS *
FLOW OF MOST EFFICIENT WATER USE REGION USED THROUGHOUT
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 28
TOTAL NUMBER OF MANUFACTURING PLANTS... 1421

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28600.	25.	550.	781889.	1398.
FLOW (MGY)	19390.	4.	326.	462860.	1067.
TOTAL CAPITAL COST	10231084.	6856.	314985.	447593984.	588911.
TOTAL ANNUAL O&M COST	1009364.	588.	22673.	32218032.	50914.
TOTAL ANNUAL COST	2308711.	1459.	62682.	89071824.	122604.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
32218032.	22379696.	34464704.	89062432.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1009364.	621243.	786895.	2360684.	200203.	3.
100000. TO 500000.	480862.	104451.	188278.	6966293.	97999.	37.
50000. TO 100000.	99291.	50568.	70177.	6315917.	14182.	90.
10000. TO 50000.	49506.	10066.	21200.	12911103.	9779.	609.
0. TO 10000.	9998.	588.	5382.	3670469.	2467.	682.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	12788855.	5538211.	9485862.	47429312.	2591949.	5.
1000000. TO 5000000.	3643426.	1004710.	1726787.	189946576.	650913.	110.
500000. TO 1000000.	998619.	500707.	689000.	120575008.	139349.	175.
100000. TO 500000.	499952.	100435.	232490.	179482352.	109251.	772.
0. TO 100000.	99206.	8570.	61733.	22162176.	28394.	359.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	3034.	627.	1682.	1998.	217.	2179.	67.	2736.	23.	0.	0.	0.
MIN	0.	1.	17.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	50.	20.	122.	34.	22.	228.	31.	145.	5.	0.	0.	0.
TOT	19262.	24545.	149281.	48178.	13933.	69660.	3339.	118937.	519.	0.	0.	0.
SD	229.	41.	134.	108.	22.	211.	7.	218.	4.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	137.	9.	414.	102.	370.	203.	8.	122.	8.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	5.	1.	11.	2.	10.	11.	2.	4.	1.	0.	0.	0.
TOT	1791.	934.	13121.	3414.	6483.	3221.	163.	2993.	104.	0.	0.	0.
SD	11.	1.	23.	6.	25.	16.	1.	7.	1.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF MOST EFFICIENT WATER USE REGION USED THROUGHOUT
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 29
TOTAL NUMBER OF MANUFACTURING PLANTS... 334

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10000.	27.	381.	127318.	876.
FLOW (MGY)	8691.	2.	289.	96377.	764.
TOTAL CAPITAL COST	19815616.	17991.	863383.	288369920.	1775938.
TOTAL ANNUAL O&M COST	830417.	925.	45474.	15188391.	83800.
TOTAL ANNUAL COST	3346999.	3276.	155123.	51811216.	308756.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
15188391.	14418495.	22204464.	51811344.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	830417.	579926.	705172.	1410343.	177126.	2.
100000. TO 500000.	402257.	101520.	209292.	6488055.	99606.	31.
50000. TO 100000.	99188.	50653.	68252.	3412618.	14749.	50.
10000. TO 50000.	49204.	10103.	24873.	3407634.	11130.	137.
0. TO 10000.	9914.	925.	4121.	469819.	2512.	114.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	24765520.	5372740.	9576118.	134065664.	5261964.	14.
1000000. TO 5000000.	4928766.	1011053.	1863630.	149090400.	903787.	80.
500000. TO 1000000.	986310.	512018.	724683.	45655008.	146808.	63.
100000. TO 500000.	494729.	101063.	314777.	26441232.	104040.	84.
0. TO 100000.	98731.	22488.	56214.	5227905.	18338.	93.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	6234.	195.	1211.	382.	18.	0.	0.	86.	0.	0.	0.	11793.
MIN	5.	0.	5.	0.	0.	0.	0.	0.	0.	0.	0.	125.
AVE	106.	12.	105.	13.	6.	0.	0.	17.	0.	0.	0.	898.
TOT	35293.	3923.	35083.	4290.	582.	0.	0.	1753.	0.	0.	0.	207435.
SD	433.	20.	138.	33.	2.	0.	0.	11.	0.	0.	0.	1347.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	208.	4.	191.	25.	7.	0.	0.	3.	0.	0.	0.	403.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.
AVE	11.	1.	9.	1.	1.	0.	0.	1.	0.	0.	0.	34.
TOT	3587.	214.	2877.	362.	92.	0.	0.	90.	0.	0.	0.	7966.
SD	21.	0.	18.	2.	1.	0.	0.	0.	0.	0.	0.	48.

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* NATIONAL TOTALS *
FLOW OF MOST EFFICIENT WATER USE REGION USED THROUGHOUT
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 30
TOTAL NUMBER OF MANUFACTURING PLANTS... 459

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20000.	45.	663.	304302.	1295.
FLOW (MGY)	877.	2.	26.	12087.	56.
TOTAL CAPITAL COST	798516.	16692.	78628.	36090400.	63530.
TOTAL ANNUAL O&M COST	69186.	759.	3975.	1824372.	4780.
TOTAL ANNUAL COST	170598.	2875.	13961.	6408067.	12779.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1824372.	1804519.	2778959.	6407850.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	69186.	69186.	69186.	69186.	0.	1.
10000. TO 50000.	37897.	10292.	16806.	336127.	8809.	20.
0. TO 10000.	9962.	755.	3240.	1419116.	1663.	438.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	998144.	538946.	692523.	2770092.	207112.	4.
100000. TO 500000.	423084.	100188.	159325.	20074944.	62274.	126.
0. TO 100000.	99593.	20865.	67690.	22270016.	16083.	329.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	52.	125.	65.	0.	333.	0.	224.	0.	0.	0.	0.
MIN	0.	0.	3.	0.	0.	9.	0.	4.	0.	0.	0.	0.
AVE	0.	3.	13.	2.	0.	40.	0.	20.	0.	0.	0.	0.
TOT	0.	1500.	6068.	913.	0.	18483.	0.	9127.	0.	0.	0.	0.
SD	0.	4.	10.	4.	0.	28.	0.	18.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	2.	12.	8.	0.	37.	0.	9.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	1.	0.	0.	2.	0.	1.	0.	0.	0.	0.
TOT	0.	208.	230.	144.	0.	791.	0.	451.	0.	0.	0.	0.
SD	0.	0.	1.	1.	0.	3.	0.	1.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW OF MOST EFFICIENT WATER USE REGION USED THROUGHOUT
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 31
TOTAL NUMBER OF MANUFACTURING PLANTS... 215

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3700.	60.	476.	102307.	504.
FLOW (MGY)	1570.	5.	107.	22941.	162.
TOTAL CAPITAL COST	1967162.	11252.	250912.	53946128.	276882.
TOTAL ANNUAL O&M COST	97106.	760.	10874.	2337973.	12277.
TOTAL ANNUAL COST	346936.	2228.	42741.	9189282.	46532.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2337973.	2697306.	4153849.	9189128.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	97106.	56573.	74024.	222072.	20845.	3.
10000. TO 50000.	49154.	10088.	18485.	1682138.	8433.	91.
0. TO 10000.	9993.	760.	3585.	433821.	3321.	121.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2458952.	1002204.	1311225.	13112251.	451655.	10.
500000. TO 1000000.	981847.	503630.	680609.	25182528.	132964.	37.
100000. TO 500000.	492709.	101384.	332635.	26943472.	107990.	81.
0. TO 100000.	91345.	14066.	25237.	2195646.	18808.	87.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	213.	843.	428.	53.	0.	0.	483.	0.	0.	0.	0.
MIN	0.	18.	107.	17.	0.	0.	0.	7.	0.	0.	0.	0.
AVE	0.	45.	226.	57.	10.	0.	0.	79.	0.	0.	0.	0.
TOT	0.	4902.	24862.	6278.	1026.	0.	0.	16880.	0.	0.	0.	0.
SD	0.	28.	111.	53.	9.	0.	0.	72.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	3.	68.	16.	55.	0.	0.	13.	0.	0.	0.	0.
MIN	0.	1.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	11.	3.	3.	0.	0.	2.	0.	0.	0.	0.
TOT	0.	117.	1202.	280.	347.	0.	0.	393.	0.	0.	0.	0.
SD	0.	0.	9.	2.	7.	0.	0.	2.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF MOST EFFICIENT WATER USE REGION USED THROUGHOUT
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 32
TOTAL NUMBER OF MANUFACTURING PLANTS... 945

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	8000.	50.	345.	325708.	586.
FLOW (MGY)	1977.	2.	61.	57805.	141.
TOTAL CAPITAL COST	911219.	10815.	76812.	72587520.	85596.
TOTAL ANNUAL O&M COST	149943.	302.	6486.	6129474.	11833.
TOTAL ANNUAL COST	258198.	1683.	16242.	15348801.	22554.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
6129474.	3629375.	5589236.	15348085.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	149943.	103769.	132062.	396185.	24786.	3.
50000. TO 100000.	96712.	50755.	66744.	734187.	14344.	11.
10000. TO 50000.	48249.	10033.	20441.	2003242.	10771.	98.
0. TO 10000.	9759.	302.	3597.	2995935.	2288.	833.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1139023.	1009300.	1074161.	2148322.	91732.	2.
500000. TO 1000000.	983536.	501116.	622447.	9336709.	137726.	15.
100000. TO 500000.	483650.	100123.	171387.	38904880.	88446.	227.
0. TO 100000.	99978.	13519.	57558.	40347856.	22923.	701.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	636.	275.	0.	191.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	10.	0.	0.	9.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	61.	9.	0.	33.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	58114.	8369.	0.	6104.	0.	0.	0.	0.	0.	0.
SD	0.	0.	61.	20.	0.	28.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	121.	29.	0.	16.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	5.	1.	0.	1.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	4771.	1100.	0.	258.	0.	0.	0.	0.	0.	0.
SD	0.	0.	9.	2.	0.	2.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF MOST EFFICIENT WATER USE REGION USED THROUGHOUT
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 33
TOTAL NUMBER OF MANUFACTURING PLANTS... 1137

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28000.	10.	902.	1025720.	2033.
FLOW (MGY)	15032.	2.	293.	332666.	1062.
TOTAL CAPITAL COST	9170367.	13073.	262558.	298528256.	706916.
TOTAL ANNUAL O&M COST	1189581.	575.	29656.	33719184.	96783.
TOTAL ANNUAL COST	2354217.	2267.	63008.	71640288.	184148.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
33719184.	14926411.	22986656.	71632240.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1189581.	508166.	723789.	10133052.	201041.	14.
100000. TO 500000.	489468.	101885.	215329.	12489085.	104839.	58.
50000. TO 100000.	96012.	50167.	69210.	4291047.	13976.	62.
10000. TO 50000.	49479.	10009.	27243.	4685810.	11183.	172.
0. TO 10000.	9721.	575.	2561.	2128171.	1801.	831.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	11462958.	5128032.	7858438.	55009072.	1977708.	7.
1000000. TO 5000000.	4976046.	1004765.	2203410.	182863056.	1125410.	83.
500000. TO 1000000.	989883.	505002.	662200.	40394192.	127163.	61.
100000. TO 500000.	498118.	102005.	243357.	58162256.	115436.	239.
0. TO 100000.	99986.	16341.	49247.	36787456.	18909.	747.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	4301.	538.	2210.	1469.	0.	457.	0.	652.	0.	3288.	0.	0.
MIN	5.	1.	9.	0.	0.	0.	0.	27.	0.	0.	0.	0.
AVE	138.	18.	123.	31.	0.	29.	0.	116.	0.	1468.	0.	0.
TOT	47173.	19659.	121755.	35055.	0.	20648.	0.	23455.	0.	30825.	0.	0.
SD	412.	50.	247.	110.	0.	32.	0.	117.	0.	718.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	267.	14.	738.	138.	0.	62.	0.	32.	0.	6.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	20.	1.	22.	3.	0.	1.	0.	5.	0.	3.	0.	0.
TOT	6825.	971.	20040.	3976.	0.	876.	0.	965.	0.	69.	0.	0.
SD	38.	1.	68.	11.	0.	3.	0.	5.	0.	1.	0.	0.

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* NATIONAL TOTALS *
FLOW OF MOST EFFICIENT WATER USE REGION USED THROUGHOUT
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 34
TOTAL NUMBER OF MANUFACTURING PLANTS... 1037

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	14000.	54.	565.	586016.	879.
FLOW (MGY)	1338.	2.	50.	52038.	88.
TOTAL CAPITAL COST	802480.	10321.	72864.	75559456.	64112.
TOTAL ANNUAL O&M COST	134477.	506.	6449.	6687613.	8944.
TOTAL ANNUAL COST	236391.	1817.	15703.	16284474.	16999.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
6687613.	3777972.	5818075.	16283660.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	134477.	105810.	120143.	240286.	20271.	2.
50000. TO 100000.	77790.	50071.	62175.	559576.	9979.	9.
10000. TO 50000.	44804.	10104.	16615.	1927382.	7953.	116.
0. TO 10000.	9945.	506.	4352.	3960450.	2252.	910.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1003100.	1003100.	1003100.	1003100.	0.	1.
500000. TO 1000000.	828484.	503909.	624040.	4992316.	111623.	8.
100000. TO 500000.	479168.	100603.	155384.	41332176.	69712.	266.
0. TO 100000.	99845.	12901.	61844.	47125408.	23572.	762.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	77.	497.	214.	0.	0.	0.	0.	14.	0.	0.	0.
MIN	0.	1.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	6.	57.	8.	0.	0.	0.	0.	1.	0.	0.	0.
TOT	0.	6054.	59587.	8513.	0.	0.	0.	0.	1410.	0.	0.	0.
SD	0.	6.	43.	14.	0.	0.	0.	0.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	3.	98.	27.	0.	0.	0.	0.	6.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	607.	4578.	1216.	0.	0.	0.	0.	286.	0.	0.	0.
SD	0.	0.	6.	2.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF MOST EFFICIENT WATER USE REGION USED THROUGHOUT
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 35
TOTAL NUMBER OF MANUFACTURING PLANTS... 790

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36000.	5.	1260.	995341.	2275.
FLOW (MGY)	1116.	0.	35.	27970.	69.
TOTAL CAPITAL COST	780710.	1489.	56526.	44655888.	54412.
TOTAL ANNUAL O&M COST	93136.	19.	4714.	3724365.	6535.
TOTAL ANNUAL COST	192286.	209.	11894.	9396240.	13402.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
3724365.	2232794.	3438501.	9395660.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	0.	0.	0.	0.	0.	0.
50000. TO 100000.	93136.	52704.	74100.	222300.	20919.	3.
10000. TO 50000.	48061.	10002.	16353.	1144701.	7867.	70.
0. TO 10000.	9932.	19.	3288.	2357462.	2118.	717.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	975888.	529561.	728561.	2185683.	227055.	3.
100000. TO 500000.	466804.	100261.	157625.	22067520.	69734.	140.
0. TO 100000.	99754.	1861.	48794.	31569696.	20802.	647.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	75.	493.	199.	0.	0.	0.	0.	14.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	4.	45.	6.	0.	0.	0.	0.	1.	0.	0.	0.
TOT	0.	3471.	35785.	4572.	0.	0.	0.	0.	824.	0.	0.	0.
SD	0.	5.	37.	11.	0.	0.	0.	0.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	2.	68.	19.	0.	0.	0.	0.	4.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	404.	2505.	660.	0.	0.	0.	0.	155.	0.	0.	0.
SD	0.	0.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF MOST EFFICIENT WATER USE REGION USED THROUGHOUT
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 36
TOTAL NUMBER OF MANUFACTURING PLANTS... 817

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	22800.	60.	1535.	1254103.	2272.
FLOW (MGY)	2082.	4.	64.	52063.	124.
TOTAL CAPITAL COST	1058221.	15421.	84645.	69154864.	80080.
TOTAL ANNUAL OEM COST	182998.	850.	7629.	6232842.	11620.
TOTAL ANNUAL COST	317392.	2804.	18389.	15016065.	21664.

ANNUAL COST OF WASTE TREATMENT

OEM	REPLACEMENT	INTEREST	TOTAL
6232842.	3457742.	5324921.	15015505.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	182998.	150182.	166590.	333181.	23205.	2.
50000. TO 100000.	70406.	52398.	59763.	537864.	7867.	9.
10000. TO 50000.	49464.	10064.	18102.	2371297.	8766.	131.
0. TO 10000.	9924.	840.	4430.	2990566.	2076.	675.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1322776.	1120940.	1221858.	2443716.	142715.	2.
500000. TO 1000000.	642345.	506674.	556910.	5012188.	48586.	9.
100000. TO 500000.	493293.	100019.	167810.	44805200.	78012.	267.
0. TO 100000.	99727.	19276.	63423.	34184944.	19312.	539.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	102.	623.	315.	0.	0.	0.	0.	18.	0.	0.	0.
MIN	0.	1.	14.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	7.	66.	10.	0.	0.	0.	0.	2.	0.	0.	0.
TOT	0.	5658.	53704.	8503.	0.	0.	0.	0.	1290.	0.	0.	0.
SD	0.	8.	52.	19.	0.	0.	0.	0.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL OEM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4.	133.	37.	0.	0.	0.	0.	9.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	502.	4309.	1152.	0.	0.	0.	0.	271.	0.	0.	0.
SD	0.	0.	8.	2.	0.	0.	0.	0.	1.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW OF MOST EFFICIENT WATER USE REGION USED THROUGHOUT
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 37
TOTAL NUMBER OF MANUFACTURING PLANTS... 562

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	38000.	150.	1923.	1080478.	3843.
FLOW (MGY)	1075.	2.	69.	38761.	117.
TOTAL CAPITAL COST	684366.	10959.	86468.	48594760.	86873.
TOTAL ANNUAL O&M COST	110910.	660.	8482.	4766777.	11857.
TOTAL ANNUAL COST	197824.	2052.	19464.	10938716.	22821.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4766777.	2429738.	3741795.	10938310.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	110910.	110910.	110910.	110910.	0.	1.
50000. TO 100000.	77642.	50084.	63698.	636978.	8405.	10.
10000. TO 50000.	49536.	10117.	20938.	2219415.	9716.	106.
0. TO 10000.	9689.	660.	4044.	1799562.	2197.	445.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	0.	0.	0.	0.	0.	0.
500000. TO 1000000.	855457.	524259.	648319.	5834875.	102208.	9.
100000. TO 500000.	482489.	100145.	194547.	33072992.	92909.	170.
0. TO 100000.	99403.	13699.	57019.	21838096.	21490.	383.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	66.	434.	173.	0.	0.	0.	0.	12.	0.	0.	0.
MIN	0.	1.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	7.	66.	11.	0.	0.	0.	0.	2.	0.	0.	0.
TOT	0.	4024.	37357.	6309.	0.	0.	0.	0.	905.	0.	0.	0.
SD	0.	8.	58.	19.	0.	0.	0.	0.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	3.	80.	22.	0.	0.	0.	0.	5.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	6.	2.	0.	0.	0.	0.	0.	0.	0.	0.
TOT	0.	365.	3306.	887.	0.	0.	0.	0.	209.	0.	0.	0.
SD	0.	0.	9.	2.	0.	0.	0.	0.	1.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT WATER USE REGION MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 20
TOTAL NUMBER OF MANUFACTURING PLANTS... 4494

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5900.	3.	206.	924045.	325.
FLOW (MGY)	81468.	1.	189.	850652.	1363.
TOTAL CAPITAL COST	39821440.	16860.	221756.	996971648.	773126.
TOTAL ANNUAL O&M COST	3125120.	669.	12810.	57566160.	58533.
TOTAL ANNUAL COST	8182441.	2874.	40978.	184156208.	156477.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
57566160.	49828576.	76735968.	184130704.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3125120.	509459.	966711.	7733691.	885569.	8.
100000. TO 500000.	437336.	103672.	181044.	10138439.	77098.	56.
50000. TO 100000.	99476.	50012.	68571.	6514255.	14187.	95.
10000. TO 50000.	49174.	10004.	19595.	19026320.	9416.	971.
0. TO 10000.	9997.	669.	4212.	14169097.	2384.	3364.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	49776800.	5560183.	11727417.	164183840.	11387870.	14.
1000000. TO 5000000.	4843651.	1005192.	1851354.	292514048.	890134.	158.
500000. TO 1000000.	999361.	503597.	673671.	182564896.	139304.	271.
100000. TO 500000.	499217.	100093.	211695.	497694976.	99339.	2351.
0. TO 100000.	99979.	21075.	64104.	108977648.	21268.	1700.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4064.	275.	21509.	87.	8209.	0.	6039.	43.	0.	0.	0.
MIN	0.	0.	0.	0.	8.	0.	0.	5.	1.	0.	0.	0.
AVE	0.	25.	34.	128.	20.	156.	0.	84.	5.	0.	0.	0.
TOT	0.	65404.	40305.	92755.	14226.	402465.	0.	377526.	3787.	0.	0.	0.
SD	0.	106.	24.	881.	10.	286.	0.	156.	5.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	50.	37.	695.	82.	2045.	0.	335.	17.	0.	0.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	2.	6.	6.	12.	0.	3.	1.	0.	0.	0.
TOT	0.	2237.	2364.	4708.	4592.	30711.	0.	12161.	797.	0.	0.	0.
SD	0.	1.	3.	30.	9.	51.	0.	6.	2.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT WATER USE REGION MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 22
TOTAL NUMBER OF MANUFACTURING PLANTS... 1021

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	9000.	35.	537.	548467.	602.
FLOW (MGY)	3944.	16.	211.	215032.	267.
TOTAL CAPITAL COST	1601387.	51579.	245159.	250306960.	171359.
TOTAL ANNUAL O&M COST	110565.	1815.	11056.	11288486.	9602.
TOTAL ANNUAL COST	275961.	8395.	42188.	43073536.	30853.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
11288486.	12515347.	19273616.	43077440.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	110565.	110565.	110565.	110565.	0.	1.
50000. TO 100000.	81627.	50933.	66693.	533547.	11418.	8.
10000. TO 50000.	49078.	10011.	17674.	6857496.	7774.	388.
0. TO 10000.	9996.	1815.	6069.	3786954.	2030.	624.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2001733.	1023608.	1294170.	23295072.	295490.	18.
500000. TO 1000000.	993253.	500009.	644197.	72794272.	122533.	113.
100000. TO 500000.	496954.	100633.	251086.	213423472.	100656.	850.
0. TO 100000.	99842.	64473.	84338.	3373509.	11305.	40.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	50.	231.	225.	0.	771.	0.	605.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	26.	0.	15.	0.	0.	0.	0.
AVE	0.	6.	40.	10.	0.	139.	0.	87.	0.	0.	0.	0.
TOT	0.	3431.	22241.	9267.	0.	126876.	0.	88484.	0.	0.	0.	0.
SD	0.	6.	29.	17.	0.	95.	0.	66.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	1.	18.	9.	0.	83.	0.	19.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	2.	1.	0.	7.	0.	2.	0.	0.	0.	0.
TOT	0.	263.	1048.	770.	0.	6741.	0.	2466.	0.	0.	0.	0.
SD	0.	0.	2.	1.	0.	7.	0.	2.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT WATER USE REGION MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 24
TOTAL NUMBER OF MANUFACTURING PLANTS... 405

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	14500.	75.	369.	149384.	774.
FLOW (MGY)	7138.	28.	402.	162984.	587.
TOTAL CAPITAL COST	2908433.	60532.	414710.	167957440.	330944.
TOTAL ANNUAL O&M COST	235249.	2150.	21569.	8735520.	23730.
TOTAL ANNUAL COST	604620.	12530.	74235.	30064992.	65620.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
8735520.	8397871.	12932716.	30066080.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	235249.	101716.	142565.	855393.	49325.	6.
50000. TO 100000.	99660.	52516.	73360.	1613920.	16953.	22.
10000. TO 50000.	49752.	10110.	23639.	5389653.	10326.	228.
0. TO 10000.	9970.	2150.	5883.	876603.	2025.	149.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3635541.	1001374.	1527984.	51479472.	570110.	35.
500000. TO 1000000.	993925.	500534.	683501.	88171680.	141278.	129.
100000. TO 500000.	499478.	100665.	283388.	68296576.	112388.	241.
0. TO 100000.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	752.	0.	1084.	0.	1073.	0.	0.	0.	0.
MIN	0.	0.	0.	3.	0.	48.	0.	29.	0.	0.	0.	0.
AVE	0.	0.	0.	48.	0.	207.	0.	160.	0.	0.	0.	0.
TOT	0.	0.	0.	19281.	0.	83750.	0.	64923.	0.	0.	0.	0.
SD	0.	0.	0.	68.	0.	139.	0.	128.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	49.	0.	145.	0.	41.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.
AVE	0.	0.	0.	4.	0.	13.	0.	5.	0.	0.	0.	0.
TOT	0.	0.	0.	1514.	0.	5359.	0.	1863.	0.	0.	0.	0.
SD	0.	0.	0.	5.	0.	15.	0.	4.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT WATER USE REGION MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 26
TOTAL NUMBER OF MANUFACTURING PLANTS... 862

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	4000.	12.	447.	385511.	540.
FLOW (MGY)	107829.	8.	3366.	2901844.	9366.
TOTAL CAPITAL COST	45535856.	25804.	1749198.	1507809024.	4307206.
TOTAL ANNUAL O&M COST	3382589.	898.	126939.	109421504.	309160.
TOTAL ANNUAL COST	9129232.	4190.	349067.	300878592.	851018.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
109421504.	75390432.	116101232.	300913152.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3382589.	501852.	1124306.	56215328.	687861.	50.
100000. TO 500000.	492097.	100759.	211831.	34740304.	94679.	164.
50000. TO 100000.	99528.	50052.	71008.	10225170.	14259.	144.
10000. TO 50000.	49615.	10121.	26695.	6967476.	11415.	261.
0. TO 10000.	9957.	898.	5262.	1278696.	2427.	243.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	56919808.	5027460.	16349176.	1062696448.	12438640.	65.
1000000. TO 5000000.	4989713.	1008279.	2161293.	644065536.	1021330.	298.
500000. TO 1000000.	997063.	513131.	755668.	111838896.	127970.	148.
100000. TO 500000.	493215.	100205.	223319.	59849456.	106521.	268.
0. TO 100000.	99799.	32254.	77295.	6415444.	16570.	83.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	18877.	0.	5454.	0.	7839.	0.	0.	14642.	0.
MIN	0.	0.	0.	1.	0.	25.	0.	12.	0.	0.	2169.	0.
AVE	0.	0.	0.	543.	0.	561.	0.	606.	0.	0.	6365.	0.
TOT	0.	0.	0.	362563.	0.	483747.	0.	425908.	0.	0.	235504.	0.
SD	0.	0.	0.	1743.	0.	680.	0.	933.	0.	0.	3265.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	0.	573.	0.	1593.	0.	459.	0.	0.	1528.	0.
MIN	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	213.	0.
AVE	0.	0.	0.	24.	0.	65.	0.	22.	0.	0.	600.	0.
TOT	0.	0.	0.	15973.	0.	55962.	0.	15300.	0.	0.	22186.	0.
SD	0.	0.	0.	55.	0.	117.	0.	44.	0.	0.	316.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT WATER USE REGION MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 28
TOTAL NUMBER OF MANUFACTURING PLANTS... 1421

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28600.	25.	550.	781889.	1398.
FLOW (MGY)	174719.	5.	1274.	1810721.	6252.
TOTAL CAPITAL COST	154120048.	8881.	837278.	1189771776.	4700918.
TOTAL ANNUAL O&M COST	5331084.	820.	66278.	94181408.	220994.
TOTAL ANNUAL COST	24904304.	1947.	172624.	245298736.	803450.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
94181408.	59488576.	91612368.	245282352.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	5331084.	511939.	1239408.	29745792.	1126818.	24.
100000. TO 500000.	484563.	100263.	201510.	32040128.	100606.	159.
50000. TO 100000.	99383.	50076.	69085.	13540689.	14197.	196.
10000. TO 50000.	49574.	10021.	24409.	16842432.	10451.	690.
0. TO 10000.	9934.	820.	5738.	2019706.	2579.	352.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	192650048.	5266615.	17663008.	635868672.	32951744.	36.
1000000. TO 5000000.	4956188.	1005091.	1988208.	465240832.	1001469.	234.
500000. TO 1000000.	996108.	500316.	702562.	193204656.	140632.	275.
100000. TO 500000.	497698.	100448.	257872.	184893888.	106174.	717.
0. TO 100000.	99025.	11101.	51302.	8157022.	28813.	159.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	121190.	2449.	5842.	14682.	490.	2755.	83.	9466.	35.	0.	0.	0.
MIN	0.	2.	21.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	671.	49.	250.	122.	37.	381.	38.	305.	8.	0.	0.	0.
TOT	259041.	59676.	304670.	172681.	22804.	116194.	4070.	249897.	821.	0.	0.	0.
SD	6604.	129.	352.	555.	45.	389.	10.	620.	7.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	645.	35.	1504.	571.	1746.	288.	16.	829.	13.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	15.	1.	33.	7.	32.	24.	3.	10.	2.	0.	0.	0.
TOT	5964.	1560.	40087.	10622.	19885.	7436.	270.	8156.	201.	0.	0.	0.
SD	49.	2.	84.	24.	108.	41.	2.	39.	3.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT WATER USE REGION MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 29
TOTAL NUMBER OF MANUFACTURING PLANTS... 334

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	10000.	27.	381.	127318.	876.
FLOW (MGY)	25451.	4.	1211.	404317.	3205.
TOTAL CAPITAL COST	67004336.	26943.	3097746.	1034647296.	8084842.
TOTAL ANNUAL O&M COST	1909998.	1645.	138654.	46310352.	273359.
TOTAL ANNUAL COST	10419546.	5067.	532080.	177714608.	1294553.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
46310352.	51732352.	79667792.	177710496.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1909998.	538860.	1123843.	20229184.	436631.	18.
100000. TO 500000.	489763.	100704.	217097.	18453280.	103867.	85.
50000. TO 100000.	98149.	50492.	69254.	4570786.	13044.	66.
10000. TO 50000.	49451.	10142.	27150.	2715001.	12661.	100.
0. TO 10000.	9821.	1645.	5293.	344064.	2266.	65.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	83755408.	5033110.	18145760.	961725952.	19984640.	53.
1000000. TO 5000000.	4895670.	1013979.	2263279.	278383360.	1059609.	123.
500000. TO 1000000.	991593.	508609.	780613.	35127600.	148052.	45.
100000. TO 500000.	478823.	101174.	221155.	15038546.	100242.	68.
0. TO 100000.	96949.	33679.	68212.	3069536.	17734.	45.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	37601.	419.	2325.	1047.	35.	0.	0.	212.	0.	0.	0.	26321.
MIN	5.	0.	10.	0.	0.	0.	0.	0.	0.	0.	0.	150.
AVE	897.	33.	244.	52.	11.	0.	0.	44.	0.	0.	0.	2681.
TOT	299446.	11088.	81636.	17515.	1097.	0.	0.	4504.	0.	0.	0.	619354.
SD	3968.	61.	353.	137.	6.	0.	0.	38.	0.	0.	0.	4285.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	482.	7.	477.	62.	21.	0.	0.	8.	0.	0.	0.	881.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.
AVE	34.	1.	30.	4.	3.	0.	0.	2.	0.	0.	0.	99.
TOT	11308.	374.	10001.	1284.	317.	0.	0.	184.	0.	0.	0.	22844.
SD	69.	1.	66.	9.	4.	0.	0.	1.	0.	0.	0.	147.

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* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT WATER USE REGION MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 30
TOTAL NUMBER OF MANUFACTURING PLANTS... 459

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20000.	45.	663.	304302.	1295.
FLOW (MGY)	4897.	3.	130.	59572.	299.
TOTAL CAPITAL COST	2438279.	21613.	204688.	93951968.	184692.
TOTAL ANNUAL O&M COST	288072.	915.	12848.	5897263.	19140.
TOTAL ANNUAL COST	597733.	3660.	38844.	17829376.	42379.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
5897263.	4697598.	7234297.	17829152.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	288072.	149120.	197247.	591740.	78703.	3.
50000. TO 100000.	87816.	50947.	63376.	570387.	11397.	9.
10000. TO 50000.	48902.	10075.	17084.	3058050.	8572.	179.
0. TO 10000.	9930.	915.	6258.	1677199.	2328.	268.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3047848.	1018852.	1651144.	9906869.	785567.	6.
500000. TO 1000000.	943558.	502751.	693907.	16653773.	149946.	24.
100000. TO 500000.	498353.	101396.	227121.	87441408.	85492.	385.
0. TO 100000.	99021.	27016.	78176.	3439725.	16810.	44.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	187.	358.	354.	0.	863.	0.	676.	0.	0.	0.	0.
MIN	0.	1.	4.	0.	0.	12.	0.	5.	0.	0.	0.	0.
AVE	0.	11.	33.	10.	0.	56.	0.	55.	0.	0.	0.	0.
TOT	0.	4896.	15299.	4416.	0.	44156.	0.	25183.	0.	0.	0.	0.
SD	0.	13.	28.	22.	0.	71.	0.	52.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	6.	56.	40.	0.	152.	0.	34.	0.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	2.	1.	0.	6.	0.	2.	0.	0.	0.	0.
TOT	0.	354.	928.	612.	0.	2968.	0.	1036.	0.	0.	0.	0.
SD	0.	0.	4.	3.	0.	10.	0.	2.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT WATER USE REGION MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 31
TOTAL NUMBER OF MANUFACTURING PLANTS... 215

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	3700.	60.	476.	102307.	504.
FLOW (MGY)	6349.	6.	238.	51165.	505.
TOTAL CAPITAL COST	2553192.	12165.	403606.	86775264.	466767.
TOTAL ANNUAL O&M COST	214222.	1061.	20028.	4306096.	26394.
TOTAL ANNUAL COST	456758.	2606.	71287.	15326736.	82708.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
4306096.	4338762.	6681692.	15326550.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	214222.	114131.	150792.	603166.	43870.	4.
50000. TO 100000.	94026.	50403.	67894.	1018414.	12902.	15.
10000. TO 50000.	46835.	10076.	22725.	2454297.	9833.	108.
0. TO 10000.	9739.	1061.	2617.	230268.	2152.	88.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3191490.	1012275.	1531969.	55150896.	578229.	36.
500000. TO 1000000.	965007.	517147.	695352.	36158288.	128973.	52.
100000. TO 500000.	494153.	109181.	314806.	14795888.	119670.	47.
0. TO 100000.	61739.	15206.	29569.	2365488.	9246.	80.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	279.	1057.	609.	99.	0.	0.	720.	0.	0.	0.	0.
MIN	0.	22.	127.	21.	0.	0.	0.	8.	0.	0.	0.	0.
AVE	0.	75.	345.	115.	14.	0.	0.	124.	0.	0.	0.	0.
TOT	0.	8221.	37899.	12635.	1433.	0.	0.	26588.	0.	0.	0.	0.
SD	0.	50.	185.	108.	14.	0.	0.	121.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4.	101.	24.	175.	0.	0.	39.	0.	0.	0.	0.
MIN	0.	1.	5.	1.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	21.	5.	7.	0.	0.	3.	0.	0.	0.	0.
TOT	0.	160.	2269.	536.	721.	0.	0.	619.	0.	0.	0.	0.
SD	0.	1.	18.	4.	19.	0.	0.	3.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT WATER USE REGION MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 32
TOTAL NUMBER OF MANUFACTURING PLANTS... 945

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	8000.	50.	345.	325708.	586.
FLOW (MGY)	7648.	5.	249.	235392.	577.
TOTAL CAPITAL COST	2938675.	20021.	191073.	180564224.	238379.
TOTAL ANNUAL O&M COST	503523.	888.	22136.	20918176.	41658.
TOTAL ANNUAL COST	872780.	3456.	46400.	43847648.	71605.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
20918176.	9028210.	13903438.	43849808.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	503523.	503523.	503523.	503523.	0.	1.
100000. TO 500000.	499543.	102218.	192441.	5773219.	95546.	30.
50000. TO 100000.	95850.	52885.	72161.	2814279.	13766.	39.
10000. TO 50000.	49749.	10058.	21186.	9703324.	9642.	458.
0. TO 10000.	9944.	888.	5095.	2124495.	2615.	417.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3673593.	1066433.	1641189.	42670928.	629780.	26.
500000. TO 1000000.	962863.	503048.	659252.	32962576.	137053.	50.
100000. TO 500000.	497916.	100554.	214533.	134941472.	90270.	629.
0. TO 100000.	99477.	25026.	63058.	15133957.	21531.	240.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	1731.	1208.	0.	322.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	17.	1.	0.	13.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	143.	36.	0.	63.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	135285.	33697.	0.	11580.	0.	0.	0.	0.	0.	0.
SD	0.	0.	153.	83.	0.	50.	0.	0.	0.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	0.	405.	98.	0.	34.	0.	0.	0.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	0.	17.	4.	0.	4.	0.	0.	0.	0.	0.	0.
TOT	0.	0.	16391.	3880.	0.	647.	0.	0.	0.	0.	0.	0.
SD	0.	0.	33.	8.	0.	5.	0.	0.	0.	0.	0.	0.

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* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT WATER USE REGION MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 33
TOTAL NUMBER OF MANUFACTURING PLANTS... 1137

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28000.	10.	902.	1025720.	2033.
FLOW (MGY)	96435.	3.	1588.	1804994.	6449.
TOTAL CAPITAL COST	150539616.	16809.	1415661.	1609606656.	7632826.
TOTAL ANNUAL O&M COST	6808742.	776.	128593.	146210000.	475993.
TOTAL ANNUAL COST	25927248.	2911.	308299.	350536192.	1424376.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
146210000.	80480320.	123939648.	350629888.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	6808742.	504294.	1679851.	92391824.	1428173.	55.
100000. TO 500000.	489468.	100787.	227402.	37521296.	100051.	165.
50000. TO 100000.	99775.	50490.	70785.	5875178.	13648.	83.
10000. TO 50000.	49998.	10144.	23355.	7894019.	10879.	338.
0. TO 10000.	9996.	776.	5111.	2535140.	2366.	496.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	188174512.	5044770.	23992272.	1463529472.	34382272.	61.
1000000. TO 5000000.	4763163.	1019747.	2140676.	329664256.	942112.	154.
500000. TO 1000000.	998590.	500588.	694539.	79871968.	137221.	115.
100000. TO 500000.	492505.	100430.	217858.	122000688.	100718.	560.
0. TO 100000.	99679.	21011.	69198.	17091792.	19195.	247.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	127753.	2354.	8050.	10078.	0.	836.	0.	2354.	0.	16948.	0.	0.
MIN	6.	1.	14.	3.	0.	0.	0.	31.	0.	0.	0.	0.
AVE	2211.	64.	380.	164.	0.	82.	0.	324.	0.	5867.	0.	0.
TOT	758376.	69903.	346887.	186295.	0.	59413.	0.	65546.	0.	123198.	0.	0.
SD	10868.	187.	754.	664.	0.	85.	0.	385.	0.	4031.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1363.	59.	4390.	813.	0.	153.	0.	183.	0.	21.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	78.	2.	100.	16.	0.	6.	0.	16.	0.	9.	0.	0.
TOT	26755.	2351.	91034.	18326.	0.	4225.	0.	3319.	0.	195.	0.	0.
SD	170.	5.	336.	57.	0.	12.	0.	26.	0.	5.	0.	0.

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* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT WATER USE REGION MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 34
TOTAL NUMBER OF MANUFACTURING PLANTS... 1037

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	14000.	54.	565.	586016.	875.
FLOW (MGY)	1935.	2.	105.	109345.	165.
TOTAL CAPITAL COST	1053750.	11417.	119223.	123634384.	101750.
TOTAL ANNUAL OGM COST	186429.	650.	12060.	12506014.	15275.
TOTAL ANNUAL COST	320256.	2154.	27199.	28205232.	20095.

ANNUAL COST OF WASTE TREATMENT

OGM	REPLACEMENT	INTEREST	TOTAL
12506014.	6181718.	9519842.	28207568.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	186429.	102873.	136193.	953348.	28959.	7.
50000. TO 100000.	99522.	51735.	68661.	1235894.	15754.	18.
10000. TO 50000.	49789.	10020.	17106.	7064812.	7948.	413.
0. TO 10000.	9952.	650.	5429.	3252048.	2614.	599.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1317187.	1079237.	1167406.	5837030.	113578.	5.
500000. TO 1000000.	880682.	507133.	644167.	12239170.	124223.	19.
100000. TO 500000.	480208.	100083.	174521.	113089424.	71583.	648.
0. TO 100000.	99947.	14272.	64058.	23380992.	24429.	365.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	102.	626.	308.	0.	0.	0.	0.	18.	0.	0.	0.
MIN	0.	1.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	10.	90.	17.	0.	0.	0.	0.	2.	0.	0.	0.
TOT	0.	10541.	93196.	17588.	0.	0.	0.	0.	2308.	0.	0.	0.
SD	0.	10.	65.	26.	0.	0.	0.	0.	2.	0.	0.	0.

DISTRIBUTION OF ANNUAL OGM TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	4.	136.	38.	0.	0.	0.	0.	9.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	8.	2.	0.	0.	0.	0.	1.	0.	0.	0.
TOT	0.	793.	8783.	2371.	0.	0.	0.	0.	558.	0.	0.	0.
SD	0.	0.	11.	3.	0.	0.	0.	0.	1.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

** NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT WATER USE REGION MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 35
TOTAL NUMBER OF MANUFACTURING PLANTS... 790

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36000.	9.	1260.	995341.	2275.
FLOW (MGY)	4290.	0.	125.	98963.	268.
TOTAL CAPITAL COST	1876150.	1721.	126457.	99900832.	146501.
TOTAL ANNUAL O&M COST	334738.	20.	13468.	10639437.	22135.
TOTAL ANNUAL COST	573009.	238.	29526.	23325792.	40625.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
10639437.	4995041.	7692360.	23326832.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	334738.	102463.	177506.	1242542.	85071.	7.
50000. TO 100000.	99960.	51629.	71549.	1502534.	13868.	21.
10000. TO 50000.	49573.	10004.	20677.	5396786.	10280.	261.
0. TO 10000.	9988.	20.	4985.	2497678.	2468.	501.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2345187.	1083486.	1617760.	8088801.	638285.	5.
500000. TO 1000000.	988624.	524762.	716858.	13620301.	129218.	19.
100000. TO 500000.	493675.	100118.	199162.	79864128.	97756.	401.
0. TO 100000.	99465.	2152.	63853.	23306272.	23944.	365.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	180.	1008.	660.	0.	0.	0.	0.	29.	0.	0.	0.
MIN	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	11.	93.	20.	0.	0.	0.	0.	2.	0.	0.	0.
TOT	0.	8637.	73621.	15796.	0.	0.	0.	0.	1846.	0.	0.	0.
SD	0.	14.	89.	43.	0.	0.	0.	0.	3.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	5.	244.	69.	0.	0.	0.	0.	16.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	10.	3.	0.	0.	0.	0.	1.	0.	0.	0.
TOT	0.	614.	7507.	2039.	0.	0.	0.	0.	480.	0.	0.	0.
SD	0.	0.	16.	5.	0.	0.	0.	0.	1.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT WATER USE REGION MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 36
TOTAL NUMBER OF MANUFACTURING PLANTS... 817

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	22800.	60.	1535.	1254103.	2272.
FLOW (MGY)	6398.	8.	159.	130111.	357.
TOTAL CAPITAL COST	2490655.	26463.	153479.	125392592.	166841.
TOTAL ANNUAL O&M COST	497106.	1555.	16380.	13382817.	29280.
TOTAL ANNUAL COST	813419.	5054.	35870.	29305712.	50236.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
13382817.	6269629.	9655224.	29307648.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	497106.	100996.	198474.	2381691.	123137.	12.
50000. TO 100000.	85255.	51978.	65501.	1441023.	11783.	22.
10000. TO 50000.	49243.	10001.	19274.	6958043.	9148.	361.
0. TO 10000.	9877.	1555.	6186.	2602138.	2033.	422.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3113318.	1040946.	1542685.	15426856.	716230.	10.
500000. TO 1000000.	935954.	502061.	649143.	15579436.	115664.	24.
100000. TO 500000.	497958.	100345.	193612.	109003408.	87472.	563.
0. TO 100000.	99972.	33078.	76063.	16733883.	15695.	220.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	236.	1284.	953.	0.	0.	0.	0.	37.	0.	0.	0.
MIN	0.	2.	23.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	13.	112.	25.	0.	0.	0.	0.	3.	0.	0.	0.
TOT	0.	10966.	91398.	20712.	0.	0.	0.	0.	2314.	0.	0.	0.
SD	0.	16.	96.	54.	0.	0.	0.	0.	3.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	7.	363.	103.	0.	0.	0.	0.	24.	0.	0.	0.
MIN	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	17.	3.	0.	0.	0.	0.	1.	0.	0.	0.
TOT	0.	698.	9490.	2586.	0.	0.	0.	0.	608.	0.	0.	0.
SD	0.	1.	21.	6.	0.	0.	0.	0.	1.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

* NATIONAL TOTALS *
FLOW OF LEAST EFFICIENT WATER USE REGION MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

SIC CODE... 37
TOTAL NUMBER OF MANUFACTURING PLANTS... 562

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	38000.	150.	1923.	1080478.	3843.
FLOW (MGY)	9935.	4.	272.	153050.	568.
TOTAL CAPITAL COST	2459936.	16197.	212827.	119608992.	276389.
TOTAL ANNUAL O&M COST	505230.	897.	27369.	15381527.	48283.
TOTAL ANNUAL COST	818912.	2954.	54395.	30569888.	83166.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
15381527.	5980449.	9209887.	30571840.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	505230.	505230.	505230.	505230.	0.	1.
100000. TO 500000.	351912.	103109.	183336.	5316744.	68912.	29.
50000. TO 100000.	94801.	51043.	70118.	2944960.	13185.	42.
10000. TO 50000.	49512.	10035.	21843.	5264148.	10865.	241.
0. TO 10000.	9955.	897.	5424.	1350554.	2649.	249.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3087420.	1044628.	1639513.	36069296.	523819.	22.
500000. TO 1000000.	962656.	516459.	680809.	31998000.	119769.	47.
100000. TO 500000.	494294.	100153.	211839.	72025168.	101484.	340.
0. TO 100000.	98016.	20246.	61576.	9421175.	21474.	153.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	235.	1267.	931.	0.	0.	0.	0.	37.	0.	0.	0.
MIN	0.	1.	14.	1.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	19.	146.	44.	0.	0.	0.	0.	4.	0.	0.	0.
TOT	0.	10825.	82061.	24570.	0.	0.	0.	0.	2151.	0.	0.	0.
SD	0.	27.	157.	90.	0.	0.	0.	0.	5.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	7.	369.	104.	0.	0.	0.	0.	29.	0.	0.	0.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	0.	1.	20.	5.	0.	0.	0.	0.	1.	0.	0.	0.
TOT	0.	606.	11021.	3039.	0.	0.	0.	0.	715.	0.	0.	0.
SD	0.	1.	35.	10.	0.	0.	0.	0.	2.	0.	0.	0.

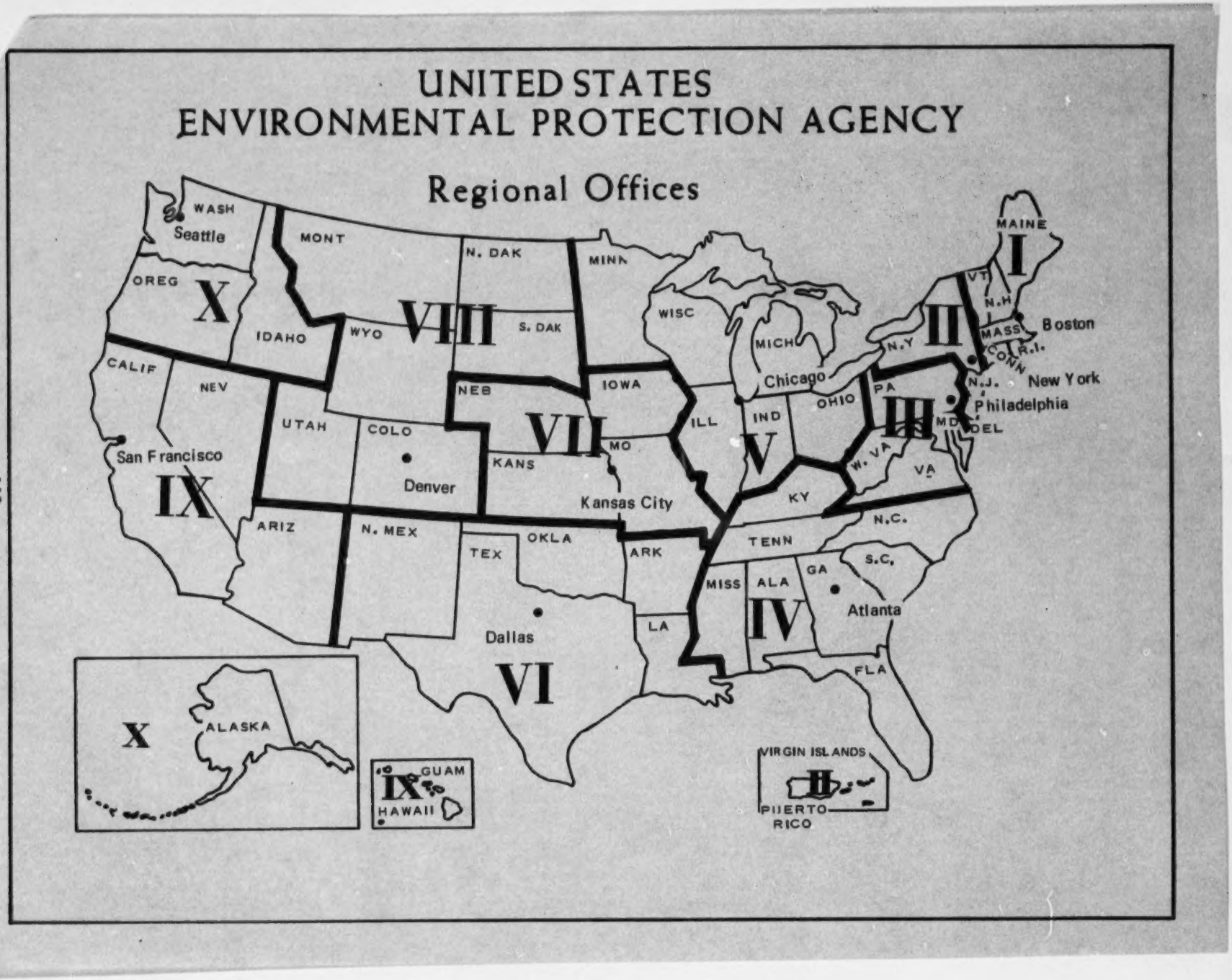
SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA ADMINISTRATIVE REGION SUMMARIES
FOR
MANUFACTURING

EPA Administrative Region Tables

Each table summarizes aggregated manufacturing conditions for one federal administrative region (cf. map). There are three sets of tables, each calculated on the basis of a separate level of observed efficiency of industrial water use.

The first set of regional tables presents treatment costs calculated on the basis of industrial water use reported for 1968. The second set of tables' costs reflect the use of "median or below" water use data, that is, in each SIC group all regional values below the efficiency of the group median are assumed to be equal to the median. The third set of costs occurs when for each SIC group all regional values below the efficiency of the most efficient third are made equal to the lowest regional efficiency among the most efficient third.


UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
Regional Offices
WASH
Seattle
OREG
X
IDAHO
MONT
N. DAK
MINN
WYO
VIII
S. DAK
WISC
MICH
Chicago
CALIF
NEV
UTAH
COLO
Denver
NEB
IOWA
VII
KANS
MO
Kansas City
ILL
IND
V
OHIO
PA
III
MD
DEL
W. VA
VA
San Francisco
IX
ARIZ
N. MEX
TEX
OKLA
ARK
KY
TENN
N.C.
S.C.
GA
MISS
ALA
IV
Atlanta
LA
Dallas
VI
FLA
N.Y
II
New York
N.J.
Philadelphia
MAINE
I
VT
N.H
MASS
Boston
R.I.
CONN
X
ALASKA
IX
GUAM
HAWAII
VIRGIN ISLANDS
II
PUERTO RICO

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EPA REGION 1
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1166

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	26000.	4.	613.	728515.	1328.
FLOW (MGY)	38463.	0.	394.	467696.	1969.
TOTAL CAPITAL COST	22591760.	3028.	317545.	377243904.	1155586.
TOTAL ANNUAL O&M COST	1232981.	273.	20075.	23849296.	68760.
TOTAL ANNUAL COST	4102133.	670.	60411.	71768816.	214598.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
23849296.	18862192.	29047760.	71759248.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1232981.	542816.	902348.	4511742.	262026.	5.
100000. TO 500000.	478572.	106556.	186311.	5961945.	83977.	32.
50000. TO 100000.	96176.	50490.	70731.	3324338.	13537.	47.
10000. TO 50000.	46529.	10056.	18822.	6757246.	8456.	359.
0. TO 10000.	9996.	273.	4428.	3298713.	2632.	745.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	28239696.	5538211.	16128292.	112898048.	8414334.	7.
1000000. TO 5000000.	4357301.	1013167.	1925035.	144377664.	914812.	75.
500000. TO 1000000.	990903.	516472.	687484.	58436144.	131929.	85.
100000. TO 500000.	493215.	100083.	217748.	132172960.	102177.	607.
0. TO 100000.	99848.	3785.	57426.	23774400.	24722.	414.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	805.	279.	1057.	7422.	139.	2871.	31.	4290.	17.	0.	8009.	1237.
MIN	0.	0.	0.	0.	4.	0.	0.	4.	0.	0.	0.	0.
AVE	37.	12.	85.	62.	15.	201.	30.	147.	2.	0.	5841.	734.
TOT	1956.	9647.	66032.	58052.	1379.	110973.	60.	97726.	815.	0.	29205.	1469.
SD	111.	22.	99.	384.	17.	324.	1.	340.	2.	0.	1770.	711.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	56.	5.	174.	187.	152.	367.	1.	131.	8.	0.	620.	39.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	5.	1.	7.	4.	5.	16.	1.	4.	1.	0.	470.	23.
TOT	259.	522.	5318.	3254.	511.	8602.	2.	2807.	182.	0.	2348.	47.
SD	9.	0.	13.	11.	16.	36.	0.	10.	1.	0.	129.	22.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION I
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1188

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	26000.	4.	613.	728515.	1328.
FLOW (MGY)	38463.	C.	380.	451957.	1969.
TOTAL CAPITAL COST	22591760.	3028.	307532.	365347584.	1155402.
TOTAL ANNUAL O&M COST	1232981.	273.	19158.	22759520.	68646.
TOTAL ANNUAL COST	4102133.	670.	58222.	69167584.	214527.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
22759520.	18267376.	28131744.	69158640.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1232981.	542816.	902348.	4511742.	262026.	5.
100000. TO 500000.	478572.	102258.	186584.	5784107.	85789.	31.
50000. TO 100000.	96176.	50490.	71254.	3206427.	14223.	45.
10000. TO 50000.	49718.	10009.	18482.	5692492.	8142.	308.
0. TO 10000.	9943.	273.	4467.	3569046.	2563.	799.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	28239696.	5538211.	16128292.	112898048.	8414334.	7.
1000000. TO 5000000.	4357301.	1013167.	1948116.	140264368.	922515.	72.
500000. TO 1000000.	989594.	500541.	686787.	54256144.	138550.	79.
100000. TO 500000.	493215.	100476.	209986.	123261568.	99930.	587.
0. TO 100000.	95848.	3785.	58926.	26104160.	25029.	443.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	805.	279.	1057.	7422.	139.	2871.	31.	4290.	14.	0.	8009.	860.
MIN	0.	0.	0.	0.	4.	0.	0.	4.	0.	0.	0.	0.
AVE	35.	11.	78.	61.	14.	198.	30.	143.	2.	0.	5841.	546.
TOT	1860.	8921.	61243.	56457.	1362.	108829.	60.	95634.	714.	0.	29205.	1092.
SD	111.	21.	95.	384.	17.	324.	1.	340.	2.	0.	1770.	444.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	56.	5.	174.	187.	152.	367.	1.	131.	5.	0.	620.	28.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	5.	1.	6.	3.	5.	15.	1.	4.	0.	0.	470.	18.
TOT	239.	458.	4726.	3088.	497.	8429.	2.	2751.	149.	0.	2348.	35.
SD	9.	0.	12.	11.	16.	36.	0.	10.	1.	0.	129.	14.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 1
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)
TOTAL NUMBER OF MANUFACTURING PLANTS... 1188

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	26000.	4.	613.	728515.	1328.
FLOW (MGY)	28884.	0.	303.	360059.	1490.
TOTAL CAPITAL COST	18275888.	3028.	270502.	321356544.	945451.
TOTAL ANNUAL O&M COST	995540.	273.	16425.	19512704.	55982.
TOTAL ANNUAL COST	3316577.	670.	50783.	60330336.	175281.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
19512704.	16067826.	24744432.	60324960.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	995540.	673024.	802768.	3211071.	155431.	4.
100000. TO 500000.	425565.	100503.	180123.	4683185.	90955.	26.
50000. TO 100000.	97433.	50490.	70923.	2695092.	14399.	38.
10000. TO 50000.	48829.	10076.	18899.	5216055.	8811.	276.
0. TO 10000.	9943.	273.	4396.	3709835.	2503.	844.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	22844848.	5538211.	13246217.	92723520.	6580989.	7.
1000000. TO 5000000.	3828667.	1013167.	1805030.	110106848.	772362.	61.
500000. TO 1000000.	989122.	502827.	703885.	54199168.	149610.	77.
100000. TO 500000.	495920.	100122.	205908.	116544208.	97928.	566.
0. TO 100000.	99848.	3785.	59127.	28203712.	24477.	477.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	805.	279.	1057.	5596.	139.	2450.	31.	3568.	14.	0.	6662.	647.
MIN	0.	0.	0.	0.	4.	0.	0.	4.	0.	0.	0.	0.
AVE	34.	11.	74.	49.	14.	175.	30.	126.	2.	0.	4858.	439.
TOT	1823.	8479.	58024.	45220.	1355.	96546.	60.	84086.	649.	0.	24290.	878.
SD	111.	21.	93.	291.	17.	277.	1.	285.	2.	0.	1472.	293.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	56.	5.	174.	144.	152.	290.	1.	100.	5.	0.	518.	21.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	4.	1.	6.	3.	5.	13.	1.	4.	0.	0.	392.	14.
TOT	231.	481.	4354.	2581.	492.	6899.	2.	2352.	131.	0.	1962.	29.
SD	9.	0.	12.	9.	16.	29.	0.	8.	0.	0.	108.	9.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 2
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1575

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36300.	3.	609.	958502.	1716.
FLOW (MGY)	69403.	0.	392.	617454.	2746.
TOTAL CAPITAL COST	84761504.	1721.	447871.	705396992.	3219516.
TOTAL ANNUAL O&M COST	4721033.	20.	27835.	43840688.	178790.
TOTAL ANNUAL COST	15485741.	238.	84722.	133437504.	586214.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
43840688.	35269840.	54315536.	133426064.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	4721033.	555945.	1914005.	13398035.	1940777.	7.
100000. TO 500000.	469437.	105625.	206304.	10934091.	92204.	53.
50000. TO 100000.	98284.	50052.	67547.	4255471.	13517.	63.
10000. TO 50000.	49749.	10001.	20787.	10601251.	9837.	510.
0. TO 10000.	9966.	20.	4945.	4657805.	2513.	942.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	105951872.	5027460.	25375440.	380631808.	33644304.	15.
1000000. TO 5000000.	4124582.	1017039.	1780353.	169133584.	723269.	95.
500000. TO 1000000.	963821.	500009.	677378.	109735280.	131472.	162.
100000. TO 500000.	497958.	100448.	220422.	195734944.	100606.	888.
0. TO 100000.	99972.	2152.	64187.	26637536.	23946.	415.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	67387.	1829.	6450.	7529.	151.	3087.	49.	4557.	33.	16948.	8508.	12469.
MIN	0.	0.	0.	0.	5.	0.	0.	4.	0.	0.	0.	0.
AVE	1066.	22.	136.	62.	22.	177.	41.	128.	3.	9499.	8508.	4265.
TOT	153572.	23150.	133814.	72090.	4239.	126299.	203.	116446.	1243.	18998.	8508.	46916.
SD	7920.	92.	330.	397.	18.	270.	5.	256.	3.	10534.	0.	3759.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	967.	43.	3025.	562.	160.	388.	3.	147.	18.	21.	725.	396.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	24.	1.	18.	5.	7.	12.	2.	4.	1.	12.	725.	138.
TOT	3408.	939.	18040.	5363.	1420.	8667.	9.	3452.	275.	25.	725.	1521.
SD	115.	2.	139.	25.	14.	32.	1.	9.	1.	12.	0.	119.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 2

FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1575

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36300.	3.	609.	958502.	1716.
FLOW (MGY)	44147.	0.	332.	523346.	1950.
TOTAL CAPITAL COST	41332192.	1721.	361852.	569916672.	1740840.
TOTAL ANNUAL O&M COST	3158657.	20.	23669.	37278640.	125230.
TOTAL ANNUAL COST	8407844.	238.	69631.	109669520.	344569.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
37278640.	28495824.	43883552.	109658016.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3158657.	555945.	1568394.	9410364.	1276292.	6.
100000. TO 500000.	434288.	100192.	184507.	9594370.	84678.	52.
50000. TO 100000.	98284.	50052.	68654.	3501359.	13737.	51.
10000. TO 50000.	49332.	10001.	20725.	9968769.	9669.	481.
0. TO 10000.	9966.	20.	4883.	4809740.	2452.	985.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	51665232.	5027460.	17713408.	230274400.	16428335.	13.
1000000. TO 5000000.	4211310.	1017039.	1750592.	161054480.	755425.	92.
500000. TO 1000000.	992622.	507642.	690487.	102192032.	138404.	148.
100000. TO 500000.	497958.	100448.	216384.	190417792.	100181.	880.
0. TO 100000.	99972.	2152.	64669.	285838C8.	23837.	442.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	29195.	1305.	4806.	7529.	151.	3087.	49.	4557.	22.	10781.	8508.	8671.
MIN	0.	0.	0.	0.	5.	0.	0.	4.	0.	0.	0.	0.
AVE	487.	19.	121.	53.	22.	174.	41.	125.	3.	6415.	8508.	2985.
TOT	70134.	20605.	119654.	61954.	4198.	124057.	203.	113899.	1122.	12831.	8508.	32832.
SD	3432.	73.	256.	322.	18.	270.	5.	250.	3.	6173.	0.	2595.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	666.	30.	2006.	374.	160.	388.	3.	147.	8.	15.	725.	278.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	17.	1.	14.	4.	7.	12.	2.	4.	1.	9.	725.	98.
TOT	2511.	874.	14123.	4523.	1397.	8460.	9.	3319.	228.	19.	725.	1076.
SD	79.	1.	93.	18.	14.	32.	1.	8.	1.	8.	0.	83.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 2
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1575

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36300.	3.	609.	958502.	1716.
FLOW (MGY)	33622.	0.	288.	453009.	1569.
TOTAL CAPITAL COST	24533520.	1721.	313338.	493507328.	1223960.
TOTAL ANNUAL O&M COST	2292765.	20.	20488.	32268944.	96737.
TOTAL ANNUAL COST	5408521.	238.	60289.	94954576.	249663.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
32268544.	24675360.	38000032.	94944336.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2292765.	555945.	1424388.	7121940.	867299.	5.
100000. TO 500000.	434288.	100382.	184131.	7733489.	83518.	42.
50000. TO 100000.	98395.	50052.	71114.	3697920.	15113.	52.
10000. TO 50000.	49332.	10021.	20866.	8763546.	9910.	420.
0. TO 10000.	9996.	20.	4694.	4957228.	2415.	1056.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	30666856.	5027460.	15849464.	158494640.	10284905.	10.
1000000. TO 5000000.	4747541.	1004459.	1816350.	152573456.	890981.	84.
500000. TO 1000000.	963821.	507642.	698923.	99946032.	134929.	143.
100000. TO 500000.	497958.	100448.	208656.	173392880.	98717.	831.
0. TO 100000.	99568.	2152.	64295.	32597456.	23507.	507.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	15385.	996.	3802.	7529.	126.	3087.	49.	4557.	22.	8653.	8508.	6517.
MIN	0.	0.	0.	0.	5.	0.	0.	4.	0.	0.	0.	0.
AVE	271.	17.	108.	47.	21.	166.	41.	118.	2.	5351.	8508.	2259.
TOT	39042.	18230.	106798.	54653.	3992.	118191.	203.	107432.	986.	10703.	8508.	24847.
SD	1808.	62.	210.	290.	16.	269.	5.	243.	3.	4669.	0.	1936.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	494.	23.	1445.	270.	115.	388.	3.	147.	6.	12.	725.	211.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	14.	1.	12.	3.	6.	11.	2.	3.	0.	8.	725.	75.
TOT	1964.	811.	11434.	3905.	1248.	8039.	9.	3111.	189.	16.	725.	822.
SD	59.	1.	68.	14.	11.	31.	1.	8.	1.	6.	0.	62.

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EPA REGION 3
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1777

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28600.	8.	637.	1131409.	1526.
FLOW (MGY)	64697.	0.	589.	1046792.	3071.
TOTAL CAPITAL COST	52425024.	2625.	518746.	921812224.	2469085.
TOTAL ANNUAL O&M COST	3101819.	253.	40164.	71370560.	176043.
TOTAL ANNUAL COST	8204226.	586.	106052.	188454320.	476069.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
71370560.	46090608.	70979504.	188440672.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3101819.	504294.	1255242.	31381056.	722561.	25.
100000. TO 500000.	499543.	100787.	230031.	18632480.	111144.	81.
50000. TO 100000.	99322.	50076.	69771.	5651446.	13907.	81.
10000. TO 50000.	49531.	10013.	20896.	10782371.	9969.	516.
0. TO 10000.	9997.	253.	4590.	4930096.	2534.	1074.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	65531280.	5117148.	17393808.	539208192.	15762845.	31.
1000000. TO 5000000.	4608797.	1012700.	2128561.	283098624.	906668.	133.
500000. TO 1000000.	995335.	505355.	692227.	94835072.	138148.	137.
100000. TO 500000.	497428.	100216.	215803.	201991904.	98087.	936.
0. TO 100000.	99799.	3281.	61604.	33266080.	22378.	540.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	27284.	1209.	4450.	11810.	87.	3561.	43.	5519.	29.	9637.	10306.	24158.
MIN	0.	0.	0.	0.	4.	0.	0.	5.	0.	0.	0.	0.
AVE	1196.	30.	168.	88.	21.	165.	32.	132.	3.	4862.	7591.	3958.
TOT	191411.	35286.	195272.	110261.	3431.	133419.	421.	138444.	1076.	14587.	15182.	83109.
SD	4039.	89.	361.	445.	15.	292.	4.	292.	2.	4160.	3840.	6444.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	654.	30.	1970.	367.	61.	735.	2.	219.	12.	14.	867.	724.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	58.	1.	28.	7.	7.	12.	1.	4.	1.	8.	634.	127.
TOT	9215.	1268.	32569.	8398.	1168.	10056.	19.	4503.	218.	23.	1267.	2667.
SD	110.	2.	123.	25.	9.	42.	0.	12.	1.	6.	330.	192.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 3
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1777

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28600.	8.	637.	1131409.	1526.
FLOW (MGY)	44500.	0.	530.	942369.	2550.
TOTAL CAPITAL COST	38536096.	2625.	469602.	834483456.	2005718.
TOTAL ANNUAL O&M COST	3161819.	253.	37445.	66540320.	166944.
TOTAL ANNUAL COST	7995902.	586.	97092.	172532624.	414300.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
66540320.	41724160.	64255184.	172519664.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3101819.	504294.	1171896.	29297408.	720445.	25.
100000. TO 500000.	483134.	100787.	215518.	17241440.	102681.	80.
50000. TO 100000.	99293.	50076.	69603.	5289836.	13638.	76.
10000. TO 50000.	49334.	10048.	20628.	9571260.	9796.	464.
0. TO 10000.	9997.	253.	4547.	5146889.	2487.	1132.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	48170112.	5165385.	15104768.	453143040.	11946733.	30.
1000000. TO 5000000.	4608797.	1012700.	2087447.	273455616.	903553.	131.
500000. TO 1000000.	995335.	502255.	703142.	90002192.	142289.	128.
100000. TO 500000.	497428.	100387.	210553.	190550752.	96665.	905.
0. TO 100000.	99938.	3281.	61894.	36084288.	22043.	583.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	27284.	1209.	4450.	6041.	87.	2492.	43.	3645.	29.	9637.	6805.	16799.
MIN	0.	0.	0.	0.	4.	0.	0.	5.	0.	0.	0.	0.
AVE	1031.	29.	159.	78.	21.	158.	32.	127.	2.	4862.	5840.	2876.
TOT	165010.	33712.	184955.	98243.	3408.	128004.	421.	133153.	987.	14587.	11681.	60404.
SD	3473.	88.	353.	336.	15.	262.	4.	248.	2.	4160.	1364.	4427.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	654.	30.	1970.	367.	61.	432.	2.	118.	12.	14.	578.	509.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	55.	1.	27.	6.	7.	11.	1.	4.	0.	8.	489.	94.
TOT	8789.	1225.	30917.	7775.	1158.	9251.	19.	4243.	192.	23.	979.	1971.
SD	107.	2.	122.	23.	9.	34.	0.	9.	1.	6.	126.	133.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 3
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1777

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28600.	8.	637.	1131409.	1526.
FLOW (MGY)	44500.	0.	428.	760439.	2013.
TOTAL CAPITAL COST	385360S6.	2625.	391327.	695387648.	1535538.
TOTAL ANNUAL O&M COST	3101819.	253.	30933.	54967792.	133866.
TOTAL ANNUAL COST	7995902.	586.	80638.	143294528.	323224.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
54967792.	34769376.	53544816.	143281984.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3101819.	503414.	1028242.	20564848.	643433.	20.
100000. TO 500000.	468983.	104908.	214093.	15200600.	93764.	71.
50000. TO 100000.	99001.	50076.	70430.	5423145.	14399.	77.
10000. TO 50000.	49722.	10012.	20733.	8541911.	10331.	412.
0. TO 10000.	9989.	253.	4381.	5243827.	2426.	1197.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	48170112.	5159936.	12524472.	313111808.	9851256.	25.
1000000. TO 5000000.	4542977.	1012700.	2025918.	255265680.	854688.	126.
500000. TO 1000000.	977606.	506890.	693009.	88012080.	143665.	127.
100000. TO 500000.	497712.	100145.	202907.	173688272.	95534.	856.
0. TO 100000.	99799.	3281.	61101.	39287888.	22183.	643.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	27284.	1209.	4450.	4555.	87.	2126.	41.	3032.	21.	7735.	5660.	12627.
MIN	0.	0.	0.	0.	4.	0.	0.	5.	0.	0.	0.	0.
AVE	675.	25.	140.	63.	20.	148.	31.	117.	2.	4036.	4968.	2255.
TOT	107945.	29097.	162946.	79615.	3295.	119667.	403.	122221.	875.	12107.	9935.	47362.
SD	2596.	73.	298.	264.	15.	239.	4.	219.	2.	3208.	978.	3291.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	654.	30.	1970.	367.	61.	342.	2.	90.	8.	12.	483.	386.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	44.	1.	21.	5.	7.	10.	1.	4.	0.	7.	418.	75.
TOT	6960.	1111.	24821.	6347.	1099.	8245.	17.	3786.	162.	20.	839.	1567.
SD	86.	2.	98.	19.	9.	29.	0.	8.	1.	4.	92.	100.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 4
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 2337

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36000.	7.	514.	1201376.	1176.
FLOW (MGY)	86263.	4.	768.	1795232.	4237.
TOTAL CAPITAL COST	67004336.	12524.	496900.	1156582400.	2668366.
TOTAL ANNUAL O&M COST	3125120.	852.	31383.	73341104.	138627.
TOTAL ANNUAL COST	10419546.	2957.	94242.	220242464.	466290.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
73341104.	57829104.	89056800.	220227008.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3125120.	502207.	1086153.	29326144.	624987.	27.
100000. TO 500000.	492097.	100263.	211792.	17366976.	94808.	82.
50000. TO 100000.	98149.	50933.	69714.	5577105.	13741.	80.
10000. TO 50000.	49678.	10004.	19971.	13759869.	9574.	689.
0. TO 10000.	9988.	852.	5016.	7318356.	2392.	1459.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	83755408.	5125247.	18094080.	669481216.	19587184.	37.
1000000. TO 5000000.	4956188.	1007640.	2060261.	296677632.	1110821.	144.
500000. TO 1000000.	997063.	500552.	688523.	116360320.	139575.	169.
100000. TO 500000.	499217.	100153.	221577.	328820992.	98049.	1484.
0. TO 100000.	99888.	15655.	68684.	34547952.	22085.	503.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	37601.	4064.	2841.	21509.	266.	8209.	66.	6640.	21.	2519.	12402.	26321.
MIN	0.	1.	0.	0.	6.	0.	0.	6.	0.	0.	0.	0.
AVE	978.	24.	117.	119.	24.	218.	39.	157.	3.	2233.	7026.	5477.
TOT	98744.	32954.	146626.	195762.	6913.	276101.	1362.	263246.	1553.	4466.	63236.	65730.
SD	5295.	128.	199.	842.	22.	467.	10.	433.	3.	405.	2955.	9646.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	482.	50.	982.	695.	503.	2045.	8.	335.	8.	5.	1015.	881.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	27.	1.	13.	6.	12.	20.	2.	5.	1.	4.	582.	180.
TOT	2705.	1035.	15984.	9412.	3425.	24872.	86.	8128.	293.	8.	5235.	2161.
SD	71.	2.	44.	27.	34.	83.	2.	18.	1.	1.	233.	315.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 4

FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 2337

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36000.	7.	514.	1201376.	1176.
FLOW (MGY)	81468.	4.	550.	1286442.	2969.
TOTAL CAPITAL COST	67004336.	12524.	419317.	979944704.	2406405.
TOTAL ANNUAL O&M COST	3125120.	718.	25307.	59141936.	116010.
TOTAL ANNUAL COST	10419546.	2574.	78566.	183608640.	410709.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
59141936.	48997232.	75455696.	183594864.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3125120.	506185.	1097019.	18649328.	682115.	17.
100000. TO 500000.	485575.	100338.	226429.	15623588.	106367.	69.
50000. TO 100000.	98445.	50691.	70840.	5383870.	15266.	76.
10000. TO 50000.	49985.	10041.	19701.	11899166.	9510.	604.
0. TO 10000.	9970.	718.	4833.	7593022.	2365.	1571.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	83755408.	5195718.	17974992.	503300096.	20959312.	28.
1000000. TO 5000000.	4956188.	1004533.	2004616.	270623232.	1140895.	135.
500000. TO 1000000.	986104.	500314.	688282.	102554048.	139422.	149.
100000. TO 500000.	498866.	100393.	217072.	306939392.	97542.	1414.
0. TO 100000.	99651.	15655.	68210.	41676144.	21808.	611.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	37601.	4064.	2841.	21509.	266.	8209.	63.	6039.	20.	2919.	8188.	26321.
MIN	0.	1.	0.	0.	6.	0.	0.	6.	0.	0.	0.	0.
AVE	670.	22.	105.	86.	22.	189.	37.	131.	3.	2233.	4698.	9452.
TOT	97969.	30307.	131186.	140889.	6378.	238504.	1304.	220076.	1282.	4466.	42281.	65421.
SD	5296.	128.	191.	658.	20.	389.	8.	329.	2.	405.	1925.	9657.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	482.	50.	982.	695.	503.	2045.	8.	335.	5.	5.	677.	881.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	26.	1.	11.	4.	10.	15.	2.	4.	0.	4.	393.	179.
TOT	2648.	974.	13913.	7186.	2964.	19112.	76.	6356.	222.	8.	3536.	2151.
SD	71.	2.	43.	22.	33.	71.	1.	13.	1.	1.	154.	315.

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EPA REGION 4

FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 2337

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36000.	7.	514.	1201376.	1176.
FLOW (MGY)	65893.	3.	409.	955785.	2261.
TOTAL CAPITAL COST	64726384.	9253.	342755.	801019136.	1949286.
TOTAL ANNUAL O&M COST	2604477.	606.	19877.	46451728.	94426.
TOTAL ANNUAL COST	10090902.	1989.	63411.	148192640.	334563.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
46451728.	40050944.	61678432.	148181104.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2604477.	506198.	1023227.	13301948.	608407.	13.
100000. TO 500000.	450110.	101472.	216486.	12123203.	98803.	56.
50000. TO 100000.	99137.	52230.	69902.	3704828.	13482.	53.
10000. TO 50000.	49752.	10012.	19237.	9637698.	9493.	501.
0. TO 10000.	9957.	606.	4487.	7691214.	2346.	1714.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	80907968.	5454358.	17097344.	376141824.	18501008.	22.
1000000. TO 5000000.	4775635.	1007220.	2078282.	201593424.	1104052.	97.
500000. TO 1000000.	993066.	503460.	695954.	98129552.	144560.	141.
100000. TO 500000.	497712.	100218.	212590.	272965376.	96537.	1284.
0. TO 100000.	99930.	11566.	66335.	52603584.	21735.	793.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	35206.	3469.	2288.	17450.	220.	7299.	97.	5269.	12.	2022.	6810.	25800.
MIN	0.	1.	0.	0.	5.	0.	0.	4.	0.	0.	0.	0.
AVE	677.	17.	84.	65.	18.	165.	34.	110.	2.	1816.	3907.	4728.
TOT	68399.	24018.	105883.	105957.	5249.	208846.	1180.	185018.	1035.	3632.	35165.	56736.
SD	4007.	108.	154.	522.	16.	338.	7.	273.	2.	291.	1601.	8535.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	472.	42.	672.	574.	356.	1717.	6.	271.	3.	4.	565.	864.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	21.	1.	8.	3.	7.	12.	2.	3.	0.	4.	328.	157.
TOT	2076.	853.	10132.	5489.	2039.	15584.	60.	5219.	165.	7.	2954.	1879.
SD	61.	1.	32.	18.	23.	59.	1.	10.	0.	1.	128.	282.

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EPA REGION 5
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 3942

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20500.	5.	717.	2826983.	1590.
FLOW (MGY)	96435.	0.	537.	2115082.	3252.
TOTAL CAPITAL COST	150539616.	3339.	491377.	1937006848.	3688041.
TOTAL ANNUAL O&M COST	6808742.	304.	42689.	168280960.	224396.
TOTAL ANNUAL COST	25927248.	728.	105050.	414108928.	682837.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
168280960.	96850336.	149149440.	414280704.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	6808742.	505230.	1639100.	65564016.	1490760.	40.
100000. TO 500000.	486195.	100704.	188443.	41269120.	82234.	219.
50000. TO 100000.	99775.	50403.	70320.	17931568.	13749.	255.
10000. TO 50000.	49789.	10008.	21040.	33937664.	10317.	1613.
0. TO 10000.	9996.	304.	5285.	9592289.	2560.	1815.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	188174512.	5044770.	25276352.	1036330496.	37876416.	41.
1000000. TO 5000000.	4788263.	1005192.	1939575.	576054016.	898515.	297.
500000. TO 1000000.	998590.	501016.	703951.	247086880.	141226.	351.
100000. TO 500000.	498629.	100093.	215778.	499095296.	97730.	2313.
0. TO 100000.	99947.	4174.	66973.	62954912.	21446.	940.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	127753.	2354.	8050.	10028.	432.	2445.	83.	7343.	44.	7323.	5293.	16737.
MIN	0.	0.	0.	0.	5.	0.	0.	6.	0.	0.	0.	0.
AVE	1898.	28.	164.	77.	25.	178.	36.	141.	4.	5858.	3445.	2000.
TOT	521828.	80957.	453625.	224815.	7847.	266855.	765.	257787.	5685.	11717.	17227.	87996.
SD	10783.	100.	374.	393.	32.	231.	12.	289.	4.	2071.	1283.	3112.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1363.	59.	4390.	813.	1309.	524.	16.	538.	30.	13.	520.	607.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	59.	1.	30.	7.	17.	15.	3.	5.	1.	10.	356.	78.
TOT	16299.	3590.	81911.	21799.	5275.	22696.	54.	9689.	1738.	21.	1782.	3422.
SD	159.	2.	162.	31.	79.	31.	3.	16.	2.	3.	132.	118.

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EPA REGION 5

FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 3942

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20500.	5.	717.	2826983.	1590.
FLOW (MGY)	81138.	0.	420.	1654067.	2301.
TOTAL CAPITAL COST	55021232.	3339.	373494.	1472313344.	1803012.
TOTAL ANNUAL O&M COST	3813776.	304.	33606.	132474960.	155743.
TOTAL ANNUAL COST	10486918.	728.	81004.	319316992.	378976.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
132474960.	73615648.	113368064.	319458560.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3813776.	507291.	1354744.	47416048.	894173.	35.
100000. TO 500000.	486195.	100360.	180212.	32257984.	75979.	179.
50000. TO 100000.	99528.	50403.	70643.	13987406.	13935.	198.
10000. TO 50000.	49854.	10002.	20509.	27584208.	10194.	1345.
0. TO 10000.	9994.	304.	5147.	11245479.	2421.	2185.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	68776528.	5044770.	16097293.	627794432.	15696684.	39.
1000000. TO 5000000.	4832921.	1003880.	1907436.	495933440.	899163.	260.
500000. TO 1000000.	994919.	505899.	708915.	199205200.	143733.	281.
100000. TO 500000.	498580.	100093.	203768.	435249152.	94631.	2136.
0. TO 100000.	99985.	4174.	67294.	82502016.	21380.	1226.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	37230.	1642.	5265.	8192.	412.	2445.	81.	6869.	35.	7323.	5299.	15949.
MIN	0.	0.	0.	0.	5.	0.	0.	6.	0.	0.	0.	0.
AVE	907.	22.	133.	59.	25.	166.	36.	133.	3.	5858.	3445.	1936.
TOT	249362.	63637.	367916.	171717.	7595.	249706.	761.	243267.	4386.	11717.	17227.	85182.
SD	3966.	74.	289.	279.	30.	230.	12.	270.	3.	2071.	1283.	2963.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	797.	36.	2428.	452.	1202.	524.	15.	484.	18.	13.	520.	580.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	46.	1.	21.	6.	16.	14.	2.	5.	1.	10.	356.	75.
TOT	12621.	3051.	59286.	16449.	4908.	20890.	52.	8911.	1188.	21.	1782.	3318.
SD	109.	2.	106.	21.	73.	31.	3.	14.	1.	3.	132.	108.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 5
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 3942

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20500.	5.	717.	2826983.	1590.
FLOW (MGY)	35015.	0.	318.	1254653.	1502.
TOTAL CAPITAL COST	29633344.	2673.	294435.	1160662784.	1089989.
TOTAL ANNUAL O&M COST	2767396.	283.	26185.	103222624.	110999.
TOTAL ANNUAL COST	653C829.	622.	63590.	250670528.	245719.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
103222624.	58033120.	89370976.	250626720.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2767396.	511689.	1093012.	31697360.	587165.	29.
100000. TO 500000.	486345.	100740.	181023.	25343152.	79388.	140.
50000. TO 100000.	99984.	50084.	71465.	11720307.	13903.	164.
10000. TO 50000.	49924.	10027.	20351.	22426848.	10157.	1102.
0. TO 10000.	9993.	283.	4808.	12053185.	2380.	2507.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	37041680.	5116908.	12834330.	372195584.	8082810.	29.
1000000. TO 5000000.	4777005.	1001477.	1933291.	434990592.	910210.	225.
500000. TO 1000000.	998817.	503251.	708608.	170066000.	147180.	240.
100000. TO 500000.	496442.	100058.	196522.	374374656.	93078.	1905.
0. TO 100000.	99842.	3342.	64521.	99556192.	21382.	1543.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	19443.	1105.	4164.	3834.	276.	2445.	73.	3870.	28.	5878.	5293.	11988.
MIN	0.	0.	0.	0.	5.	0.	0.	5.	0.	0.	0.	0.
AVE	467.	17.	108.	45.	20.	155.	35.	117.	2.	4702.	3445.	1609.
TOT	128468.	49297.	298663.	131048.	6345.	231782.	726.	213644.	3501.	9404.	17227.	70806.
SD	1871.	55.	225.	194.	21.	226.	10.	220.	3.	1662.	1283.	2227.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	592.	27.	1749.	327.	577.	524.	11.	202.	14.	11.	520.	439.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	34.	1.	16.	4.	10.	13.	2.	4.	1.	9.	356.	63.
TOT	9329.	2628.	43179.	12650.	3142.	19189.	45.	7609.	870.	18.	1782.	2784.
SD	80.	1.	76.	15.	36.	30.	2.	9.	1.	3.	132.	82.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 6
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1168

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	12600.	5.	385.	449901.	777.
FLOW (MGY)	469987.	1.	2204.	2574679.	16038.
TOTAL CAPITAL COST	1007273984.	6625.	2165136.	2528879616.	29987968.
TOTAL ANNUAL O&M COST	13023192.	433.	100373.	117235088.	486124.
TOTAL ANNUAL COST	140946944.	1275.	375299.	438349056.	4240858.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
117235088.	126443968.	194723632.	438402560.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	13023192.	501852.	1481451.	72591136.	1885683.	49.
100000. TO 500000.	481396.	103202.	245464.	29701200.	109904.	121.
50000. TO 100000.	99383.	50758.	71977.	5902091.	12996.	82.
10000. TO 50000.	49549.	10004.	21558.	6079441.	10810.	282.
0. TO 10000.	9958.	433.	4677.	2965231.	2377.	634.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	1259092480.	5063841.	36776160.	2647884288.	147750720.	72.
1000000. TO 5000000.	4989713.	1001198.	2292695.	320977408.	1163236.	140.
500000. TO 1000000.	997248.	503597.	668384.	60822976.	132579.	91.
100000. TO 500000.	496428.	100121.	208005.	109618848.	94926.	527.
0. TO 100000.	99979.	8281.	64727.	21877824.	21658.	338.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	933376.	5127.	11186.	38936.	765.	4678.	74.	17886.	30.	10770.	14316.	24581.
MIN	0.	0.	0.	0.	3.	0.	0.	9.	0.	0.	0.	0.
AVE	8159.	79.	303.	299.	54.	273.	58.	307.	3.	6136.	8492.	3357.
TOT	1378881.	57873.	202106.	242163.	10150.	127279.	520.	216024.	648.	24546.	16984.	251745.
SD	72108.	272.	678.	1722.	94.	525.	9.	1038.	3.	3543.	8237.	4861.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1458.	76.	3696.	1390.	3944.	827.	16.	2459.	11.	15.	1420.	911.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	72.	2.	56.	16.	97.	29.	8.	15.	1.	9.	816.	128.
TOT	12102.	1269.	37153.	12586.	18290.	13478.	69.	10859.	139.	36.	1633.	9622.
SD	148.	4.	192.	64.	346.	81.	4.	104.	1.	5.	853.	182.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 6
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1168

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	12600.	5.	385.	449901.	777.
FLOW (MGY)	75127.	1.	696.	813341.	3305.
TOTAL CAPITAL COST	41570496.	4296.	633327.	739726080.	2355551.
TOTAL ANNUAL O&M COST	2527266.	324.	42886.	50090496.	141979.
TOTAL ANNUAL COST	7806717.	869.	123324.	144042976.	436396.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
50090496.	36986288.	56958880.	144035664.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2527266.	584607.	988634.	15818137.	534176.	16.
100000. TO 500000.	490134.	101186.	210026.	20162480.	103082.	96.
50000. TO 100000.	96023.	50024.	69174.	4565502.	14227.	66.
10000. TO 50000.	49756.	10004.	20826.	6497741.	10092.	312.
0. TO 10000.	9993.	324.	4500.	3050877.	2329.	678.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	51963120.	5063841.	12364570.	469853696.	10719716.	38.
1000000. TO 5000000.	4989713.	1002662.	2250621.	258821456.	1081779.	115.
500000. TO 1000000.	991593.	500739.	721480.	57718384.	150643.	80.
100000. TO 500000.	496428.	100438.	206631.	113853488.	95661.	551.
0. TO 100000.	99979.	5370.	63797.	24497888.	21669.	384.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	24662.	1305.	3376.	9994.	335.	3273.	45.	5502.	15.	6946.	9453.	15244.
MIN	0.	0.	0.	0.	3.	0.	0.	9.	0.	0.	0.	0.
AVE	634.	37.	155.	105.	30.	211.	38.	165.	2.	4310.	6060.	2214.
TOT	107105.	27328.	103324.	85208.	5688.	98726.	338.	116078.	573.	17241.	12120.	166049.
SD	2398.	102.	253.	494.	42.	381.	5.	404.	2.	1887.	4798.	3134.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	322.	18.	702.	317.	872.	525.	4.	346.	5.	11.	947.	563.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	31.	1.	20.	6.	25.	20.	2.	6.	0.	7.	580.	86.
TOT	5260.	786.	13218.	5146.	4816.	9186.	22.	3945.	113.	27.	1160.	6414.
SD	54.	2.	50.	20.	79.	56.	1.	19.	1.	3.	519.	118.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 6
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1168

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	12600.	5.	385.	449901.	777.
FLOW (MGY)	42476.	0.	441.	515006.	1898.
TOTAL CAPITAL COST	22401616.	3477.	458414.	535427072.	1501155.
TOTAL ANNUAL O&M COST	1592842.	290.	30207.	35282160.	94663.
TOTAL ANNUAL COST	4437846.	732.	88431.	103287808.	282176.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
35282160.	26771344.	41227856.	103281360.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1592842.	615914.	878698.	7029585.	346573.	8.
100000. TO 500000.	491766.	102196.	218928.	14668183.	108744.	67.
50000. TO 100000.	95285.	50817.	73689.	4421315.	14378.	60.
10000. TO 50000.	49969.	10095.	21261.	5995737.	10610.	282.
0. TO 10000.	9882.	290.	4223.	3171523.	2290.	751.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	28002016.	5028106.	10019261.	270520064.	6628265.	27.
1000000. TO 5000000.	4809508.	1014334.	2185664.	216380752.	1019817.	99.
500000. TO 1000000.	999554.	500238.	703424.	49943120.	144202.	71.
100000. TO 500000.	499571.	100019.	207467.	103111280.	101377.	497.
0. TO 100000.	99937.	4346.	62042.	29408064.	22474.	474.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	6429.	873.	1902.	7536.	224.	2793.	41.	4210.	14.	5668.	7862.	11458.
MIN	0.	0.	0.	0.	3.	0.	0.	8.	0.	0.	0.	0.
AVE	289.	27.	114.	70.	23.	185.	34.	126.	2.	3483.	5112.	1729.
TOT	48918.	19849.	76251.	56605.	4269.	86351.	305.	88596.	487.	13931.	10223.	129690.
SD	901.	74.	170.	339.	27.	331.	4.	283.	2.	1558.	3889.	2368.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	221.	12.	376.	245.	418.	431.	3.	173.	4.	9.	791.	427.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	21.	1.	13.	4.	14.	16.	2.	4.	0.	6.	490.	67.
TOT	3597.	648.	8467.	3559.	2553.	7504.	18.	2805.	90.	23.	980.	5042.
SD	37.	1.	31.	14.	38.	45.	1.	11.	0.	3.	426.	90.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 7
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 676

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	38000.	5.	562.	380053.	1804.
FLOW (MGY)	11233.	0.	284.	191659.	714.
TOTAL CAPITAL COST	6487405.	1766.	269700.	182317024.	540694.
TOTAL ANNUAL O&M COST	934050.	248.	21831.	14758060.	51101.
TOTAL ANNUAL COST	1757950.	472.	56081.	37910560.	116195.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
14758060.	9115850.	14038403.	37912304.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	934050.	934050.	934050.	934050.	0.	1.
100000. TO 500000.	386960.	101396.	165622.	4306161.	83122.	26.
50000. TO 100000.	93440.	50012.	67114.	2416092.	13960.	36.
10000. TO 50000.	48284.	10011.	22544.	5252803.	10974.	233.
0. TO 10000.	9902.	248.	4866.	1849078.	2407.	380.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	8109256.	5266615.	7141856.	21425568.	1624308.	3.
1000000. TO 5000000.	4500546.	1009335.	1902274.	74188720.	951632.	39.
500000. TO 1000000.	996108.	502534.	719259.	38839968.	153999.	54.
100000. TO 500000.	494909.	100142.	215134.	80460000.	102403.	374.
0. TO 100000.	99701.	2207.	63036.	12985404.	22569.	206.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	2663.	423.	1794.	1078.	137.	1266.	42.	1433.	37.	0.	0.	4620.
MIN	0.	0.	0.	0.	3.	0.	0.	6.	0.	0.	0.	0.
AVE	164.	24.	117.	38.	24.	158.	36.	113.	5.	0.	0.	1101.
TOT	6554.	9921.	44425.	15160.	3169.	36094.	323.	45739.	1113.	0.	0.	19820.
SD	453.	47.	157.	103.	18.	201.	5.	162.	6.	0.	0.	1074.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	213.	11.	576.	108.	146.	135.	4.	46.	15.	0.	0.	180.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	18.	1.	14.	4.	12.	11.	2.	4.	1.	0.	0.	45.
TOT	737.	402.	5352.	1456.	1629.	2576.	21.	1474.	300.	0.	0.	812.
SD	36.	1.	38.	8.	18.	19.	1.	5.	2.	0.	0.	42.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 7

FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 676

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	38000.	5.	562.	380053.	1804.
FLOW (MGY)	9075.	0.	229.	155064.	603.
TOTAL CAPITAL COST	5186667.	1766.	234531.	158543008.	459782.
TOTAL ANNUAL O&M COST	774778.	248.	18359.	12410536.	42966.
TOTAL ANNUAL COST	1433484.	472.	48142.	32543664.	98278.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
12410536.	7927149.	12207805.	32545472.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	774778.	774778.	774778.	774778.	0.	1.
100000. TO 500000.	386960.	100160.	165980.	2821665.	81937.	17.
50000. TO 100000.	91086.	50727.	68531.	2330045.	12416.	34.
10000. TO 50000.	47866.	10045.	21875.	4550084.	10394.	208.
0. TO 10000.	9842.	248.	4649.	1934083.	2375.	416.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	6483333.	5266615.	5942240.	17826720.	619438.	3.
1000000. TO 5000000.	3854687.	1005819.	1826346.	60269424.	816195.	33.
500000. TO 1000000.	986690.	502534.	683797.	32822256.	159526.	48.
100000. TO 500000.	499856.	100303.	210376.	70896784.	98210.	337.
0. TO 100000.	99908.	2207.	64184.	16366940.	22580.	255.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1925.	361.	1566.	874.	137.	1055.	41.	1433.	30.	0.	0.	3580.
MIN	0.	0.	0.	0.	3.	0.	0.	6.	0.	0.	0.	0.
AVE	129.	20.	104.	32.	22.	141.	36.	97.	4.	0.	0.	967.
TOT	5169.	8309.	39531.	12469.	2828.	32227.	320.	39371.	912.	0.	0.	17407.
SD	330.	41.	138.	84.	17.	181.	5.	145.	5.	0.	0.	835.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	179.	10.	475.	89.	146.	114.	3.	46.	11.	0.	0.	141.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	16.	1.	12.	3.	10.	9.	2.	3.	1.	0.	0.	40.
TOT	645.	361.	4444.	1207.	1350.	2169.	20.	1266.	229.	0.	0.	720.
SD	30.	1.	31.	6.	17.	16.	1.	4.	2.	0.	0.	33.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 7
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 676

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	38000.	5.	562.	380053.	1804.
FLOW (MGY)	6320.	0.	165.	111719.	388.
TOTAL CAPITAL COST	3629454.	1766.	191852.	129691616.	342913.
TOTAL ANNUAL O&M COST	564708.	248.	14232.	9620715.	30386.
TOTAL ANNUAL COST	1025849.	472.	38595.	26090064.	71542.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
9620715.	6484580.	9986249.	26091536.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	564708.	564708.	564708.	564708.	0.	1.
100000. TO 500000.	202366.	108113.	137148.	1371478.	36846.	10.
50000. TO 100000.	97056.	52632.	69625.	1740616.	15149.	25.
10000. TO 50000.	48426.	10044.	21516.	3958867.	9870.	184.
0. TO 10000.	9921.	248.	4353.	1985173.	2404.	456.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	4536817.	1032301.	1935204.	52250512.	950091.	27.
500000. TO 1000000.	986690.	504808.	721100.	28122896.	164108.	39.
100000. TO 500000.	494153.	100410.	205226.	63209472.	94779.	308.
0. TO 100000.	99403.	2207.	61372.	18534368.	22133.	302.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1133.	276.	1244.	612.	96.	860.	38.	864.	25.	0.	0.	2691.
MIN	0.	0.	0.	0.	3.	0.	0.	5.	0.	0.	0.	0.
AVE	86.	16.	86.	22.	19.	119.	34.	79.	3.	0.	0.	853.
TOT	3428.	6479.	32761.	8724.	2462.	27349.	305.	32093.	746.	0.	0.	15346.
SD	190.	31.	104.	52.	14.	147.	4.	110.	4.	0.	0.	654.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	133.	8.	343.	64.	76.	96.	3.	26.	8.	0.	0.	107.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	13.	1.	9.	2.	8.	7.	2.	3.	1.	0.	0.	36.
TOT	516.	318.	3278.	900.	1038.	1702.	18.	1038.	173.	0.	0.	640.
SD	23.	1.	21.	4.	11.	12.	1.	3.	1.	0.	0.	26.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 8
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 235

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	7500.	3.	354.	83096.	791.
FLOW (MGY)	20529.	3.	738.	173520.	2119.
TOTAL CAPITAL COST	14344988.	12200.	715003.	168025616.	1561321.
TOTAL ANNUAL O&M COST	1643703.	782.	57798.	13582640.	146728.
TOTAL ANNUAL COST	3199011.	2331.	148601.	34921280.	336396.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
13582640.	8401280.	12937966.	34921872.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1643703.	674226.	1097520.	3292560.	496284.	3.
100000. TO 500000.	437354.	101267.	212020.	6360599.	76943.	30.
50000. TO 100000.	99476.	50305.	71588.	2147630.	15252.	30.
10000. TO 50000.	47869.	10434.	21596.	1209352.	10606.	56.
0. TO 10000.	9965.	782.	4936.	572540.	2656.	116.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	17931232.	5074037.	9040242.	63281696.	5416430.	7.
1000000. TO 5000000.	4650511.	1022620.	2230782.	113769888.	1149473.	51.
500000. TO 1000000.	917923.	503804.	685914.	7545050.	154991.	11.
100000. TO 500000.	493401.	100792.	206020.	21838128.	92498.	106.
0. TO 100000.	99648.	15251.	59966.	3597937.	22294.	60.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	6569.	624.	2483.	3919.	136.	2080.	35.	2911.	32.	6137.	5434.	3088.
MIN	0.	1.	0.	0.	7.	0.	0.	8.	0.	0.	0.	0.
AVE	560.	57.	179.	165.	29.	371.	31.	185.	5.	6137.	5434.	1736.
TOT	12873.	8234.	22703.	22321.	1055.	31174.	92.	28260.	226.	6137.	5434.	29515.
SD	1347.	98.	306.	418.	26.	426.	4.	318.	6.	0.	0.	866.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	363.	18.	1027.	192.	175.	220.	2.	91.	11.	10.	533.	130.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	50.	2.	32.	12.	20.	36.	2.	6.	1.	10.	533.	72.
TOT	1155.	236.	4127.	1568.	724.	3019.	5.	929.	56.	10.	533.	1220.
SD	75.	2.	105.	24.	39.	51.	0.	11.	2.	0.	0.	36.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 8
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 235

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	7500.	3.	354.	83096.	791.
FLOW (MGY)	18395.	3.	531.	124765.	1581.
TOTAL CAPITAL COST	10703240.	12200.	551365.	129570768.	1125039.
TOTAL ANNUAL O&M COST	1492168.	782.	44653.	10493356.	118950.
TOTAL ANNUAL COST	2851479.	2331.	114674.	26948384.	255886.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
10493356.	6478538.	9976944.	26948832.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1492168.	526845.	1009506.	2019012.	682587.	2.
100000. TO 500000.	476877.	101267.	179479.	5204891.	86024.	29.
50000. TO 100000.	83695.	50485.	65380.	1372973.	10214.	21.
10000. TO 50000.	48237.	10022.	22882.	1350065.	11787.	59.
0. TO 10000.	9738.	782.	4407.	546456.	2466.	124.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	13379050.	5577258.	9584757.	28754272.	3905273.	3.
1000000. TO 5000000.	4591495.	1022620.	2231393.	93718512.	996192.	42.
500000. TO 1000000.	974062.	565460.	833127.	15829415.	128999.	19.
100000. TO 500000.	483989.	101853.	198354.	19240304.	96160.	97.
0. TO 100000.	99648.	15251.	59754.	4421828.	23008.	74.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	5483.	575.	2314.	1699.	136.	1301.	35.	1688.	24.	3014.	3150.	2393.
MIN	0.	1.	0.	0.	7.	0.	0.	8.	0.	0.	0.	0.
AVE	432.	46.	152.	114.	25.	303.	31.	145.	4.	3014.	3150.	1370.
TOT	9928.	6654.	19261.	15387.	927.	25483.	92.	22213.	173.	3014.	3150.	23289.
SD	1123.	82.	264.	250.	25.	334.	4.	233.	5.	0.	0.	650.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	332.	16.	930.	174.	175.	147.	2.	51.	7.	6.	313.	101.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	41.	1.	26.	9.	17.	27.	2.	5.	1.	6.	313.	57.
TOT	953.	206.	3265.	1165.	623.	2230.	5.	721.	39.	6.	313.	970.
SD	68.	2.	90.	18.	38.	37.	0.	8.	1.	0.	0.	27.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 8

FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 235

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	7500.	3.	354.	83096.	791.
FLOW (MGY)	12810.	3.	397.	93185.	1217.
TOTAL CAPITAL COST	7040471.	12200.	435067.	102226944.	852305.
TOTAL ANNUAL O&M COST	1085523.	782.	34335.	8068838.	90228.
TOTAL ANNUAL COST	1979662.	2331.	89581.	21051472.	193008.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
8068838.	5111326.	7871440.	21051600.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1085523.	1085523.	1085523.	1085523.	0.	1.
100000. TO 500000.	437354.	102845.	174986.	3674709.	102771.	21.
50000. TO 100000.	96163.	50485.	72506.	1450126.	15728.	20.
10000. TO 50000.	48084.	10046.	22502.	1305101.	11251.	58.
0. TO 10000.	9626.	782.	4099.	553426.	2374.	135.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	8800588.	5577258.	7465765.	22397296.	1681512.	3.
1000000. TO 5000000.	3728195.	1002785.	1892388.	68125904.	692826.	36.
500000. TO 1000000.	966439.	535361.	746449.	17168336.	99373.	23.
100000. TO 500000.	420555.	100369.	174780.	15031055.	76209.	86.
0. TO 100000.	98227.	15251.	58179.	5061599.	23226.	87.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	3071.	439.	1835.	1281.	136.	1110.	32.	1470.	19.	2419.	2620.	1799.
MIN	0.	1.	0.	0.	6.	0.	0.	6.	0.	0.	0.	0.
AVE	274.	36.	123.	83.	22.	253.	30.	121.	3.	2419.	2620.	1057.
TOT	6309.	5190.	15639.	11269.	831.	21286.	90.	18462.	143.	2419.	2620.	17970.
SD	637.	64.	215.	186.	25.	275.	3.	203.	4.	0.	0.	476.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	246.	13.	671.	126.	175.	108.	2.	51.	6.	5.	261.	77.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	32.	1.	19.	6.	15.	20.	2.	4.	1.	5.	261.	44.
TOT	726.	175.	2392.	871.	552.	1701.	5.	597.	30.	5.	261.	754.
SD	51.	1.	66.	14.	38.	27.	0.	7.	1.	0.	0.	20.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 9
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1142

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	22000.	4.	543.	620575.	1341.
FLOW (MGY)	11521.	0.	315.	359816.	755.
TOTAL CAPITAL COST	14700979.	2353.	354986.	405394432.	742204.
TOTAL ANNUAL O&M COST	787954.	292.	26692.	30482704.	55845.
TOTAL ANNUAL COST	2603061.	591.	71781.	81974128.	145464.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
30482704.	20269712.	31215344.	81967760.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	787954.	525777.	647157.	2588628.	134395.	4.
100000. TO 500000.	489468.	101716.	191054.	8215314.	84634.	43.
50000. TO 100000.	99660.	50187.	68985.	6622571.	14775.	96.
10000. TO 50000.	49574.	10075.	22391.	10188132.	10329.	455.
0. TO 10000.	9966.	292.	5280.	2872327.	2410.	544.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	18376208.	5681357.	9413730.	56482384.	5110830.	6.
1000000. TO 5000000.	4895670.	1001374.	1856954.	183838512.	938039.	99.
500000. TO 1000000.	982193.	503048.	689729.	104838816.	130933.	152.
100000. TO 500000.	499478.	100153.	235452.	144096640.	107321.	612.
0. TO 100000.	99290.	2941.	64333.	17562832.	21015.	273.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	3674.	378.	2111.	1037.	164.	1471.	43.	1806.	12.	1960.	0.	9541.
MIN	0.	0.	0.	0.	5.	0.	0.	11.	0.	0.	0.	0.
AVE	180.	21.	132.	44.	27.	199.	37.	142.	3.	1715.	0.	2089.
TOT	14947.	16364.	87134.	33948.	2970.	101425.	262.	94034.	803.	3430.	0.	50127.
SD	485.	37.	169.	97.	23.	200.	4.	170.	2.	346.	0.	2208.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	183.	7.	678.	104.	197.	170.	3.	62.	4.	4.	0.	364.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	19.	1.	16.	4.	13.	15.	2.	5.	1.	4.	0.	82.
TOT	1601.	773.	10541.	3274.	1464.	7628.	14.	3029.	180.	8.	0.	1974.
SD	30.	1.	38.	8.	25.	23.	0.	5.	1.	1.	0.	84.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 9
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1142

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	22000.	4.	543.	620575.	1341.
FLOW (MGY)	11521.	0.	272.	310963.	733.
TOTAL CAPITAL COST	147CC579.	2353.	323045.	368917760.	732502.
TOTAL ANNUAL O&M COST	787954.	292.	23930.	27327792.	54933.
TOTAL ANNUAL COST	2603061.	591.	64962.	74186560.	143414.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
27327792.	18445872.	28406640.	74180304.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	787954.	525777.	647157.	2588628.	134395.	4.
100000. TO 500000.	489468.	102360.	194142.	7571552.	86396.	39.
50000. TO 100000.	99113.	50092.	67624.	5004204.	14126.	74.
10000. TO 50000.	49574.	10009.	21283.	9194070.	10498.	432.
0. TO 10000.	9966.	292.	5014.	2973136.	2364.	593.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	18376208.	5681357.	9413730.	56482384.	5110830.	6.
1000000. TO 5000000.	4895670.	1012156.	1888641.	160534512.	960439.	85.
500000. TO 1000000.	992309.	501252.	692798.	82443008.	137532.	119.
100000. TO 500000.	497658.	100153.	227121.	142404800.	104556.	627.
0. TO 100000.	99290.	2941.	63467.	19357520.	21122.	305.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	3674.	346.	2111.	1037.	164.	1351.	43.	1806.	12.	1960.	0.	9541.
MIN	0.	0.	0.	0.	5.	0.	0.	11.	0.	0.	0.	0.
AVE	180.	20.	123.	38.	26.	174.	37.	124.	2.	1715.	0.	2089.
TOT	14947.	15302.	81355.	29148.	2846.	88727.	262.	82077.	745.	3430.	0.	50127.
SD	485.	35.	165.	91.	24.	187.	4.	162.	2.	346.	0.	2208.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	183.	7.	678.	104.	197.	163.	3.	62.	4.	4.	0.	364.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	19.	1.	15.	4.	13.	12.	2.	4.	1.	4.	0.	82.
TOT	1601.	746.	9605.	2830.	1399.	6344.	14.	2647.	163.	8.	0.	1974.
SD	30.	1.	37.	7.	25.	21.	0.	5.	1.	1.	0.	84.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 9

FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1142

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	22000.	4.	543.	620575.	1341.
FLOW (MGY)	5895.	0.	197.	225428.	489.
TOTAL CAPITAL COST	1470C979.	2353.	274225.	313165056.	684647.
TOTAL ANNUAL O&M COST	736C39.	292.	18880.	21560976.	44386.
TOTAL ANNUAL COST	2603061.	591.	53710.	61336544.	128566.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
21560976.	15658251.	24113696.	61332912.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	736039.	538860.	637449.	1274898.	139431.	2.
100000. TO 500000.	489468.	100659.	184741.	6281192.	86765.	34.
50000. TO 100000.	99802.	50005.	65965.	2902478.	14185.	44.
10000. TO 50000.	49CC9.	10057.	20228.	7807867.	9689.	386.
0. TO 10000.	9991.	292.	4877.	3297152.	2421.	676.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500CCCO.	183762C8.	5681357.	9899625.	49498128.	5556985.	5.
1000000. TO 5000000.	4895670.	1013609.	1847167.	121913040.	863325.	66.
500000. TO 1000000.	977296.	501252.	703431.	61901920.	135093.	88.
100000. TO 500000.	499246.	100153.	220639.	134148384.	101986.	608.
0. TO 100000.	99663.	2941.	64127.	24047744.	22933.	375.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	3674.	254.	1376.	529.	110.	1097.	43.	1018.	10.	1960.	0.	9541.
MIN	0.	0.	0.	0.	4.	0.	0.	7.	0.	0.	0.	0.
AVE	156.	16.	101.	28.	20.	150.	37.	100.	2.	1715.	0.	2089.
TOT	12964.	12227.	67164.	21419.	2203.	76442.	262.	66317.	643.	3430.	0.	50127.
SD	473.	28.	131.	62.	16.	159.	4.	120.	2.	346.	0.	2208.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	183.	7.	370.	97.	95.	130.	3.	29.	4.	4.	0.	364.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	17.	1.	11.	3.	7.	10.	2.	3.	0.	4.	0.	82.
TOT	1413.	668.	7141.	2165.	826.	5081.	14.	2142.	132.	8.	0.	1974.
SD	30.	1.	26.	5.	12.	17.	0.	4.	0.	1.	0.	84.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 10
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 444

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	31000.	15.	465.	206291.	1670.
FLOW (MGY)	105627.	6.	1906.	846099.	8914.
TOTAL CAPITAL COST	52907440.	22206.	1256638.	557947392.	4246614.
TOTAL ANNUAL O&M COST	3956620.	1434.	91974.	40836320.	336167.
TOTAL ANNUAL COST	10675863.	4264.	251570.	111697056.	867395.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
40836320.	27897360.	42961920.	111695600.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3956620.	538955.	1579836.	22117712.	1119073.	14.
100000. TO 500000.	452282.	101703.	194045.	9120120.	97069.	47.
50000. TO 100000.	97956.	52723.	68257.	2866775.	13923.	42.
10000. TO 50000.	49874.	10046.	25976.	6182204.	10526.	238.
0. TO 10000.	9791.	1434.	5345.	550530.	2175.	103.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	66134288.	5136670.	20670352.	392736768.	16631610.	19.
1000000. TO 5000000.	4959988.	1041225.	2021941.	153667552.	1018832.	76.
500000. TO 1000000.	999361.	508154.	722201.	107607984.	133750.	149.
100000. TO 500000.	497758.	100886.	253786.	40605808.	117577.	160.
0. TO 100000.	99104.	27758.	70837.	2833487.	21316.	40.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	953.	269.	1763.	21838.	109.	6101.	60.	8930.	18.	11110.	16679.	2657.
MIN	0.	1.	0.	0.	6.	0.	0.	18.	0.	0.	0.	0.
AVE	161.	35.	213.	438.	27.	460.	53.	380.	4.	8287.	9399.	1338.
TOT	2417.	6737.	28548.	123408.	850.	135700.	105.	133591.	213.	41434.	75587.	9368.
SD	248.	49.	281.	1973.	21.	704.	11.	890.	3.	2896.	4528.	703.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	130.	8.	539.	687.	85.	1882.	5.	565.	8.	17.	1735.	108.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	23.	1.	35.	22.	13.	52.	4.	15.	1.	13.	863.	55.
TOT	341.	246.	4703.	6106.	412.	15485.	8.	5271.	51.	67.	7766.	383.
SD	33.	1.	73.	69.	20.	155.	2.	52.	1.	4.	479.	28.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 10

FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS

1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 444

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	31000.	15.	465.	206291.	1670.
FLOW (MGY)	45250.	4.	833.	369964.	3821.
TOTAL CAPITAL COST	27730240.	18786.	715001.	317460480.	2252825.
TOTAL ANNUAL O&M COST	2068368.	1189.	49105.	21802656.	174021.
TOTAL ANNUAL COST	5590107.	3585.	139913.	62121440.	456950.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
21802656.	15873023.	24444432.	62120096.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2068368.	574512.	1087280.	9785525.	555438.	9.
100000. TO 500000.	423465.	104642.	188107.	5078900.	79579.	27.
50000. TO 100000.	98924.	50137.	77478.	1936961.	13438.	25.
10000. TO 50000.	49855.	10020.	19336.	4002540.	9773.	207.
0. TO 10000.	9968.	1189.	5680.	999638.	2734.	176.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	34662800.	6671221.	13664084.	191297184.	8735270.	14.
1000000. TO 5000000.	4385741.	1039375.	2072193.	87032144.	831267.	42.
500000. TO 1000000.	933277.	500127.	681307.	42241040.	131589.	62.
100000. TO 500000.	490012.	101129.	275227.	72109392.	110239.	262.
0. TO 100000.	98016.	23483.	64976.	4158439.	20536.	64.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	373.	196.	895.	9470.	97.	3816.	49.	5177.	18.	5458.	9668.	2657.
MIN	0.	1.	0.	0.	6.	0.	0.	12.	0.	0.	0.	0.
AVE	116.	26.	153.	191.	22.	286.	43.	220.	3.	4071.	4868.	1338.
TOT	1736.	4992.	20491.	53737.	701.	84448.	86.	77570.	173.	20353.	43811.	9368.
SD	127.	36.	184.	856.	18.	444.	9.	517.	3.	1423.	2625.	703.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	72.	5.	207.	321.	65.	937.	3.	243.	8.	10.	1019.	108.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	18.	1.	21.	10.	9.	26.	3.	8.	1.	8.	507.	55.
TOT	275.	207.	2790.	2879.	284.	7695.	5.	2644.	40.	39.	4560.	383.
SD	21.	1.	37.	32.	14.	77.	1.	23.	1.	2.	281.	28.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

EPA REGION 10
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 444

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	31000.	15.	465.	206291.	1670.
FLOW (MGY)	33981.	3.	638.	283289.	2869.
TOTAL CAPITAL COST	22402384.	16220.	602995.	267729872.	1828658.
TOTAL ANNUAL O&M COST	1668232.	1014.	39795.	17668928.	139745.
TOTAL ANNUAL COST	4513334.	3086.	116374.	51670272.	369683.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
17668928.	13386492.	20615184.	51670592.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1668232.	560223.	924841.	7398725.	447337.	8.
100000. TO 500000.	468C91.	102812.	178815.	4112740.	88732.	23.
50000. TO 100000.	89950.	53030.	70460.	1620584.	11233.	23.
10000. TO 50000.	48C79.	10020.	18829.	3370332.	8829.	179.
0. TO 10000.	9968.	1014.	5530.	1166900.	2780.	211.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	28002976.	5409001.	11108321.	155516496.	7041109.	14.
1000000. TO 5000000.	4385741.	1039375.	1846699.	70174592.	722012.	38.
500000. TO 1000000.	990183.	500791.	678171.	33230368.	129865.	49.
100000. TO 500000.	490069.	100429.	277710.	69705280.	107549.	251.
0. TO 100000.	98961.	20275.	65616.	6036708.	22041.	92.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	371.	148.	785.	7141.	65.	3256.	45.	4307.	9.	4380.	8040.	2657.
MIN	0.	1.	0.	0.	6.	0.	0.	10.	0.	0.	0.	0.
AVE	95.	20.	121.	146.	18.	255.	39.	190.	2.	3267.	4049.	1338.
TOT	1425.	3862.	16162.	41038.	584.	75278.	78.	67031.	129.	16336.	36438.	9368.
SD	106.	28.	150.	645.	13.	377.	8.	429.	2.	1142.	2183.	703.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	54.	5.	171.	248.	31.	740.	2.	185.	3.	8.	851.	108.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	16.	1.	15.	8.	6.	21.	2.	6.	0.	7.	423.	55.
TOT	240.	179.	2005.	2262.	198.	6332.	4.	2197.	25.	33.	3810.	383.
SD	17.	1.	29.	25.	8.	61.	1.	17.	1.	2.	235.	28.

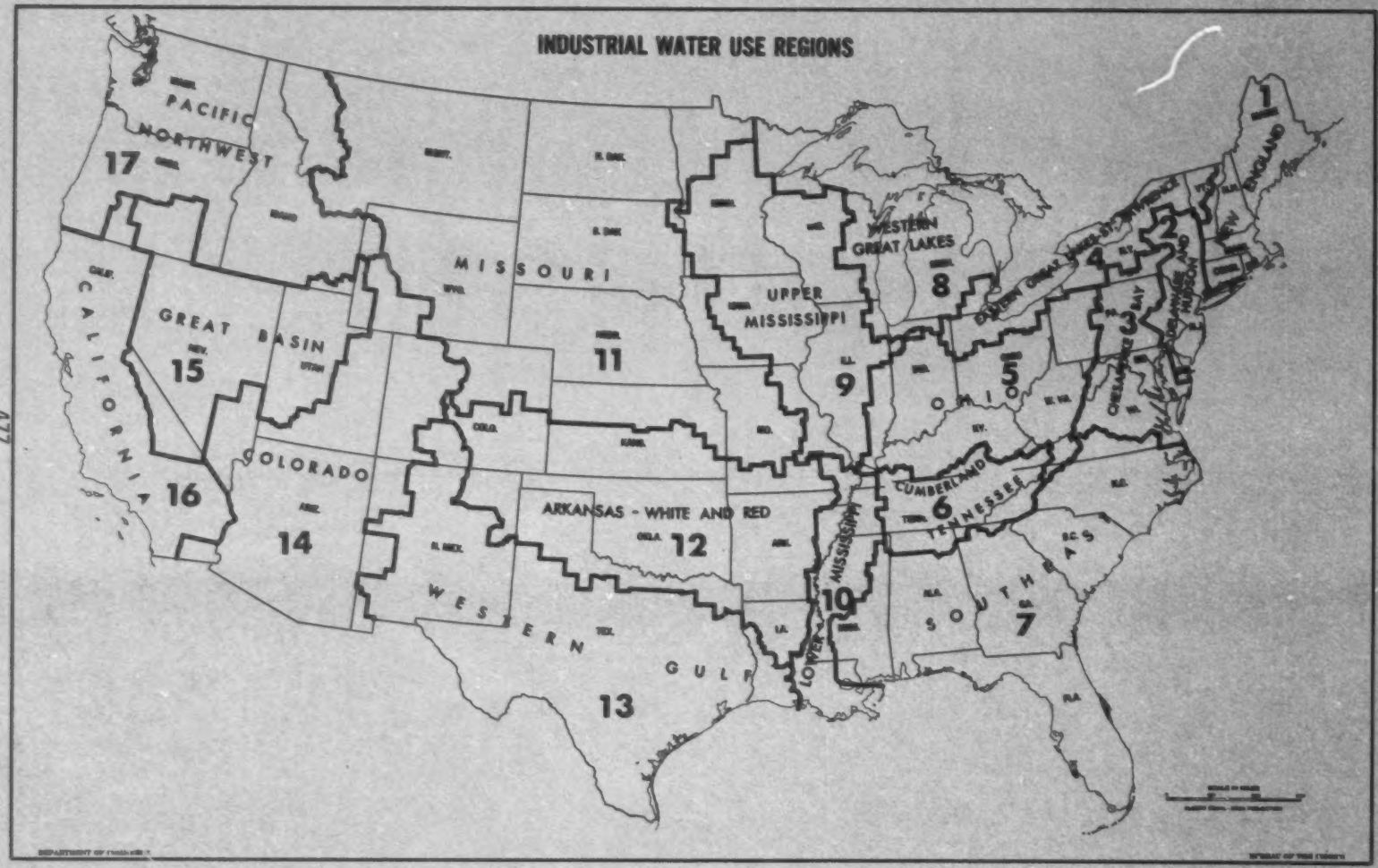
SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

INDUSTRIAL WATER USE REGION
SUMMARIES FOR MANUFACTURING

Industrial Water Use Regional Tables

Each table summarizes aggregated manufacturing conditions for one of the industrial water use regions defined by the Bureau of the Census (cf. maps). There are three sets of tables, each calculated on the basis of a separate level of observed efficiency of industrial water use.

The first set of regional tables presents treatment costs calculated on the basis of industrial water use reported for 1968. The second set of tables' costs reflect the use of "median or below" water use data, that is, in each SIC group all regional values below the efficiency of the group median are assumed to be equal to the median. The third set of costs occurs when for each SIC group all regional values below the efficiency of the most efficient third are made equal to the lowest regional efficiency among the most efficient third.


INDUSTRIAL WATER USE REGIONS
PACIFIC NORTHWEST
17
CALIFORNIA
16
GREAT BASIN
15
COLORADO
14
MISSOURI
11
WESTERN GULF
13
ARKANSAS - WHITE AND RED
12
UPPER MISSISSIPPI
9
WESTERN GREAT LAKES
8
OHIO
5
CUMBERLAND TENNESSEE
6
LOWER MISSISSIPPI
10
SOUTHEAST
7
CHESAPEAKE BAY
3
DELAWARE AND HUDSON
2
NEW ENGLAND
1

CODES FOR WATER USE REGIONS

Code	Region
1	New England
2	Delaware Hudson
3	Chesapeake Bay
4	Eastern Great Lakes
5	Ohio
6	Cumberland and Tennessee
7	Southeast
8	Western Great Lakes
9	Upper Mississippi
10	Lower Mississippi
11	Missouri
12	Arkansas-White and Red
13	Western Gulf
14	Colorado
15	Great Basin
16	California
17	Pacific Northwest

WATER USE REGION 1
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1167

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	26000.	4.	619.	721838.	1337.
FLOW (MGY)	38463.	0.	394.	459464.	1985.
TOTAL CAPITAL COST	22591760.	3028.	317960.	371059712.	1164914.
TOTAL ANNUAL O&M COST	1232981.	273.	19978.	23314848.	60168.
TOTAL ANNUAL COST	4102133.	670.	60367.	70448560.	216238.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
23314848.	18552976.	28571568.	70439392.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1232981.	542816.	902348.	4511742.	262026.	5.
100000. TO 500000.	478572.	106556.	186392.	5778138.	85364.	31.
50000. TO 100000.	96176.	50490.	70539.	3244797.	13623.	46.
10000. TO 50000.	46529.	10056.	18743.	6522658.	8350.	348.
0. TO 10000.	9996.	273.	4426.	3[illegible]1954.	2622.	737.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	28239696.	5538211.	16128292.	112898048.	8414334.	7.
1000000. TO 5000000.	4357301.	1013167.	1932261.	141055072.	926301.	73.
500000. TO 1000000.	990903.	516472.	689462.	57914784.	131448.	84.
100000. TO 500000.	493215.	100083.	216630.	128461456.	101053.	593.
0. TO 100000.	99848.	3785.	57552.	23596432.	24792.	410.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	805.	279.	1057.	7422.	139.	2871.	31.	4290.	17.	0.	8009.	1237.
MIN	0.	0.	0.	0.	4.	0.	0.	4.	0.	0.	0.	0.
AVE	38.	12.	83.	63.	15.	201.	30.	147.	2.	0.	5841.	1237.
TOT	1898.	9553.	63164.	56999.	1379.	109803.	60.	97023.	808.	0.	29205.	1237.
SD	115.	22.	95.	388.	17.	325.	1.	341.	2.	0.	1770.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	56.	5.	174.	187.	152.	367.	1.	131.	8.	0.	620.	39.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	5.	1.	7.	3.	5.	16.	1.	4.	1.	0.	470.	39.
TOT	248.	518.	4997.	3163.	511.	8523.	2.	2789.	180.	0.	2348.	39.
SD	9.	0.	12.	11.	16.	36.	0.	10.	1.	0.	129.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 1
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1167

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	26000.	4.	619.	721838.	1337.
FLOW (MGY)	38463.	0.	381.	444360.	1985.
TOTAL CAPITAL COST	22591760.	3028.	308172.	359636736.	1164761.
TOTAL ANNUAL O&M COST	1232981.	273.	19085.	22271920.	69053.
TOTAL ANNUAL COST	4102133.	670.	58230.	67954432.	216165.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
22271920.	17981824.	27692000.	67945744.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1232981.	542816.	902348.	4511742.	262026.	5.
100000. TO 500000.	478572.	102258.	186677.	5600300.	87254.	30.
50000. TO 100000.	96176.	50490.	71066.	3126886.	14330.	44.
10000. TO 50000.	49718.	10009.	18431.	5529257.	8088.	300.
0. TO 10000.	9943.	273.	4452.	3507845.	2544.	788.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	28239696.	5538211.	16128292.	112898048.	8414334.	7.
1000000. TO 5000000.	4357301.	1013167.	1956311.	136941776.	934415.	70.
500000. TO 1000000.	989594.	500541.	686787.	54256144.	138550.	79.
100000. TO 500000.	493215.	100476.	208916.	119709088.	99279.	573.
0. TO 100000.	99848.	3785.	58992.	25838400.	25080.	438.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	805.	279.	1057.	7422.	139.	2871.	31.	4290.	14.	0.	8009.	860.
MIN	0.	0.	0.	0.	4.	0.	0.	4.	0.	0.	0.	0.
AVE	36.	11.	77.	61.	14.	197.	30.	143.	2.	0.	5841.	860.
TOT	1816.	8859.	58612.	55522.	1362.	107737.	60.	94961.	708.	0.	29205.	860.
SD	114.	21.	91.	388.	17.	325.	1.	341.	2.	0.	1770.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	56.	5.	174.	187.	152.	367.	1.	131.	5.	0.	620.	28.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	5.	1.	6.	3.	5.	15.	1.	4.	0.	0.	470.	28.
TOT	232.	495.	4433.	3004.	497.	8355.	2.	2734.	148.	0.	2348.	28.
SD	9.	0.	11.	11.	16.	36.	0.	10.	1.	0.	129.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 1
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1167

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	26000.	4.	619.	721833.	1337.
FLOW (MGY)	28884.	0.	303.	353531.	1501.
TOTAL CAPITAL COST	18275888.	3028.	270952.	316201472.	952838.
TOTAL ANNUAL O&M COST	995540.	273.	16363.	19096064.	56294.
TOTAL ANNUAL COST	3316577.	670.	50778.	59257936.	176566.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
19096064.	15810072.	24347488.	59253616.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	995540.	673024.	802768.	3211071.	155431.	4.
100000. TO 500000.	425565.	100503.	181166.	4529153.	92671.	25.
50000. TO 100000.	97433.	50490.	70691.	2615552.	14525.	37.
10000. TO 50000.	48829.	10076.	18932.	5092646.	8848.	269.
0. TO 10000.	9943.	273.	4387.	3649983.	2493.	832.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	22844848.	5538211.	13246217.	92723520.	6580989.	7.
1000000. TO 5000000.	3828667.	1013167.	1813605.	107002704.	783444.	59.
500000. TO 1000000.	989122.	502827.	703886.	54199184.	149609.	77.
100000. TO 500000.	495920.	100122.	205309.	113535824.	97658.	553.
0. TO. 100000.	99848.	3785.	59157.	27862992.	24506.	471.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	805.	279.	1057.	5596.	139.	2450.	31.	3568.	14.	0.	6662.	647.
MIN	0.	0.	0.	0.	4.	0.	0.	4.	0.	0.	0.	0.
AVE	36.	11.	73.	49.	14.	175.	30.	126.	2.	0.	4858.	647.
TOT	1784.	8428.	55760.	44398.	1355.	95469.	60.	83414.	644.	0.	24290.	647.
SD	114.	21.	90.	294.	17.	277.	1.	286.	2.	0.	1472.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	56.	5.	174.	144.	152.	290.	1.	100.	5.	0.	518.	21.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	5.	1.	5.	3.	5.	13.	1.	4.	0.	0.	392.	21.
TOT	225.	478.	4116.	2510.	492.	6826.	2.	2335.	130.	0.	1962.	21.
SD	9.	0.	11.	9.	16.	29.	0.	8.	0.	0.	108.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 2
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1743

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36300.	3.	538.	937824.	1469.
FLOW (MGY)	33622.	0.	274.	477841.	1212.
TOTAL CAPITAL COST	52425024.	1721.	377205.	657467904.	1895329.
TOTAL ANNUAL O&M COST	1546250.	20.	21360.	37229904.	77255.
TOTAL ANNUAL COST	8204226.	238.	69271.	120739792.	313129.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
37229904.	32873392.	50624992.	120728288.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1546250.	555945.	938248.	7505981.	416976.	8.
100000. TO 500000.	499543.	107140.	210501.	9051529.	103135.	43.
50000. TO 100000.	98079.	50076.	67058.	3419939.	14100.	51.
10000. TO 50000.	49749.	10001.	21048.	12058050.	9890.	573.
0. TO 10000.	9997.	20.	4869.	5200173.	2501.	1068.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	65531280.	5300970.	18634864.	279523072.	17827664.	15.
1000000. TO 5000000.	3960036.	1012700.	1888713.	162429376.	766735.	86.
500000. TO 1000000.	963821.	500009.	681688.	128157296.	130671.	188.
100000. TO 500000.	497958.	100448.	223295.	222625152.	100246.	997.
0. TO 100000.	99972.	2152.	63981.	29239280.	23654.	457.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	24744.	954.	2231.	7529.	101.	3087.	49.	4557.	31.	2050.	8508.	24158.
MIN	0.	0.	0.	0.	5.	0.	0.	4.	0.	0.	0.	0.
AVE	404.	18.	121.	43.	20.	165.	41.	115.	3.	2036.	8508.	6697.
TOT	66603.	21639.	133871.	56990.	4401.	133866.	203.	119032.	1214.	4071.	8508.	107158.
SD	2407.	49.	184.	249.	13.	246.	5.	215.	3.	21.	0.	6943.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	390.	12.	422.	211.	64.	388.	3.	147.	14.	4.	725.	724.
MIN	0.	0.	0.	0.	0.	0	0.	0.	0.	0.	0.	0.
AVE	16.	1.	11.	3.	6.	10.	2.	3.	1.	4.	725.	210.
TOT	2654.	917.	12536.	4046.	1228.	8257.	9.	3263.	237.	8.	725.	3354.
SD	48.	1.	32.	9.	7.	27.	1.	6.	1.	0.	0.	208.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 2
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1743

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36300.	3.	538.	937824.	1469.
FLOW (MGY)	33622.	0.	247.	430810.	1098.
TOTAL CAPITAL COST	30403136.	1721.	328980.	573425408.	1272966.
TOTAL ANNUAL O&M COST	1420058.	20.	19184.	33437920.	63639.
TOTAL ANNUAL COST	4921994.	238.	60972.	106274048.	221996.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
33437920.	28671264.	44153728.	106262912.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1420058.	555945.	820818.	5745726.	328603.	7.
100000. TO 500000.	434288.	100192.	188275.	7907535.	86110.	42.
50000. TO 100000.	98079.	50076.	67787.	3050814.	13740.	45.
10000. TO 50000.	49334.	10001.	21062.	11373458.	9906.	540.
0. TO 10000.	9997.	20.	4839.	5366590.	2467.	1109.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	38003920.	5165385.	14663249.	190622240.	10904073.	13.
1000000. TO 5000000.	4211310.	1012700.	1834006.	157724576.	756040.	86.
500000. TO 1000000.	963821.	507642.	689535.	120668656.	132176.	175.
100000. TO 500000.	497958.	100448.	218009.	217790736.	99796.	999.
0. TO 100000.	99972.	2152.	64072.	30113808.	23653.	470.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	11095.	954.	1793.	7529.	101.	3087.	49.	4557.	29.	2050.	8508.	16799.
MIN	0.	0.	0.	0.	5.	0.	0.	4.	0.	0.	0.	0.
AVE	212.	17.	113.	40.	20.	162.	41.	113.	3.	2036.	8508.	4657.
TOT	35019.	20535.	124354.	52745.	4353.	131190.	203.	116846.	1172.	4071.	8508.	74517.
SD	1098.	47.	158.	245.	13.	245.	5.	215.	3.	21.	0.	4828.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	266.	12.	422.	211.	64.	388.	3.	147.	12.	4.	725.	509.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	13.	1.	10.	3.	6.	10.	2.	3.	1.	4.	725.	147.
TOT	2101.	893.	10969.	3704.	1202.	8051.	9.	3201.	223.	8.	725.	2356.
SD	34.	1.	26.	9.	7.	27.	1.	6.	1.	0.	0.	146.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 2
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1743

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36300.	3.	538.	937824.	1469.
FLOW (MGY)	33622.	0.	224.	389992.	1055.
TOTAL CAPITAL COST	23681296.	1721.	295222.	514572032.	1025332.
TOTAL ANNUAL O&M COST	1420058.	20.	17307.	30166400.	57423.
TOTAL ANNUAL COST	4427581.	238.	54806.	95527552.	185113.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
30166400.	25728592.	39622016.	95517008.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1420058.	555945.	781286.	4687474.	324979.	6.
100000. TO 500000.	434288.	101529.	184907.	7026478.	85190.	38.
50000. TO 100000.	98395.	50076.	68944.	3033519.	15138.	44.
10000. TO 50000.	49332.	10021.	21029.	9946495.	10149.	473.
0. TO 10000.	9996.	20.	4634.	5477954.	2394.	1182.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	29601616.	6493532.	14056694.	140566944.	8391328.	10.
1000000. TO 5000000.	4747541.	1012700.	1876008.	157584736.	851522.	84.
500000. TO 1000000.	963821.	507642.	691091.	113338880.	132573.	164.
100000. TO 500000.	497958.	100351.	207404.	197863760.	97052.	954.
0. TO 100000.	99968.	2152.	64012.	33990512.	23489.	531.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	6082.	954.	1793.	7529.	101.	3087.	49.	4557.	22.	2050.	8508.	12627.
MIN	0.	0.	0.	0.	5.	0.	0.	4.	0.	0.	0.	0.
AVE	139.	16.	104.	37.	19.	153.	41.	107.	2.	2036.	8508.	3501.
TOT	23009.	19019.	115019.	49173.	4186.	123923.	203.	110488.	1046.	4071.	8508.	56011.
SD	621.	46.	145.	243.	13.	245.	5.	214.	3.	21.	0.	3629.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	197.	12.	422.	211.	64.	388.	3.	147.	8.	4.	725.	386.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	11.	1.	9.	3.	5.	9.	2.	3.	0.	4.	725.	112.
TOT	1795.	852.	9744.	3380.	1135.	7520.	9.	3030.	188.	8.	725.	1785.
SD	27.	1.	24.	9.	7.	27.	1.	6.	1.	0.	0.	111.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 3
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 769

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28000.	8.	581.	447107.	1391.
FLOW (MGY)	44500.	4.	406.	312341.	2128.
TOTAL CAPITAL COST	38536096.	11935.	336971.	259130432.	1578018.
TOTAL ANNUAL O&M COST	3101819.	679.	24560.	18886784.	123858.
TOTAL ANNUAL COST	7995902.	2606.	67354.	51795312.	322955.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
18886784.	12956520.	19953024.	51796320.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3101819.	557865.	1464809.	4394429.	1420448.	3.
100000. TO 500000.	483134.	106809.	205514.	5959907.	97932.	29.
50000. TO 100000.	99322.	50393.	69417.	2429594.	13498.	35.
10000. TO 50000.	44525.	10090.	19276.	3970853.	8913.	206.
0. TO 10000.	9966.	679.	4301.	2133347.	2557.	496.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	48170112.	5117148.	15684997.	94109984.	16399273.	6.
1000000. TO 5000000.	4608797.	1081411.	2121691.	103953104.	947891.	49.
500000. TO 1000000.	995335.	506890.	664742.	25924928.	127667.	39.
100000. TO 500000.	492392.	101235.	213304.	83401744.	94333.	391.
0. TO 100000.	99047.	14919.	58191.	16526275.	22753.	284.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	27284.	1209.	4450.	4282.	87.	2372.	43.	2612.	13.	0.	4876.	5939.
MIN	0.	1.	0.	0.	4.	0.	0.	6.	0.	0.	0.	0.
AVE	982.	19.	113.	66.	19.	165.	33.	111.	2.	0.	4876.	2269.
TOT	31424.	9054.	50148.	31173.	1582.	61534.	390.	54896.	438.	0.	4876.	13614.
SD	4809.	64.	244.	290.	13.	279.	4.	241.	2.	0.	0.	1957.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	654.	30.	1970.	367.	54.	377.	2.	91.	3.	0.	400.	222.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	36.	1.	15.	5.	7.	13.	1.	4.	1.	0.	400.	80.
TOT	1148.	389.	6707.	2337.	562.	4988.	17.	1769.	90.	0.	400.	480.
SD	115.	1.	96.	20.	8.	37.	0.	9.	0.	0.	0.	73.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 3
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 769

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28000.	0.	581.	447107.	1391.
FLOW (MGY)	44500.	4.	390.	299801.	2118.
TOTAL CAPITAL COST	38536096.	11935.	322418.	247939520.	1555663.
TOTAL ANNUAL O&M COST	3101819.	679.	23292.	17911792.	122616.
TOTAL ANNUAL COST	7995902.	2606.	64238.	49398800.	319153.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
17911792.	12396975.	19091328.	49400080.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3101819.	557865.	1464809.	4394429.	1420448.	3.
100000. TO 500000.	483134.	105309.	186678.	5413651.	90386.	29.
50000. TO 100000.	96038.	50393.	68543.	2124833.	13307.	31.
10000. TO 50000.	48571.	10170.	19281.	3779049.	8998.	196.
0. TO 10000.	9966.	679.	4315.	2200878.	2533.	510.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	48170112.	6000886.	17080592.	85402960.	17833136.	5.
1000000. TO 5000000.	4608797.	1039183.	2121251.	99698816.	1001208.	47.
500000. TO 1000000.	995335.	506890.	687431.	26809808.	145953.	39.
100000. TO 500000.	492392.	101235.	209026.	81102112.	93085.	388.
0. TO 100000.	99864.	14919.	58323.	16913744.	22546.	290.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	27284.	1209.	4450.	4282.	87.	2372.	43.	2612.	13.	0.	4876.	4130.
MIN	0.	1.	0.	0.	4.	0.	0.	6.	0.	0.	0.	0.
AVE	944.	18.	107.	63.	19.	163.	33.	110.	2.	0.	4876.	1578.
TOT	30217.	8541.	47260.	29871.	1575.	60797.	390.	41520.	423.	0.	4876.	9467.
SD	4809.	63.	237.	289.	13.	279.	4.	241.	2.	0.	0.	1361.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	654.	30.	1970.	367.	54.	377.	2.	91.	3.	0.	400.	156.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	34.	1.	14.	5.	7.	13.	1.	4.	0.	0.	400.	56.
TOT	1074.	375.	6182.	2206.	559.	4921.	17.	1756.	85.	0.	400.	337.
SD	115.	1.	95.	19.	8.	37.	0.	9.	0.	0.	0.	51.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 3
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 769

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28000.	8.	581.	447107.	1391.
FLOW (MGY)	44500.	3.	344.	264268.	1969.
TOTAL CAPITAL COST	38536096.	11935.	299035.	229958128.	1517098.
TOTAL ANNUAL O&M COST	3101819.	679.	21072.	16204217.	119828.
TOTAL ANNUAL COST	7995902.	2534.	59046.	45406416.	311694.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
16204217.	11497905.	17706752.	45408864.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3101819.	632743.	1867281.	3734562.	1745900.	2.
100000. TO 500000.	468983.	104908.	193799.	4651185.	93477.	24.
50000. TO 100000.	95026.	51216.	71287.	1924752.	13416.	27.
10000. TO 50000.	49722.	10012.	20095.	3576829.	10083.	178.
0. TO 10000.	9989.	679.	4307.	2316970.	2551.	538.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	48170112.	5204145.	15888953.	79444768.	18399056.	5.
1000000. TO 5000000.	4469382.	1082563.	2106676.	84267056.	930162.	40.
500000. TO 1000000.	977606.	506890.	698499.	30035456.	154041.	43.
100000. TO 500000.	492392.	100264.	202079.	76385984.	92155.	378.
0. TO 100000.	99035.	14919.	57153.	17317424.	22553.	303.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	27284.	1209.	4450.	4282.	87.	2119.	41.	2291.	13.	0.	4276.	3105.
MIN	0.	1.	0.	0.	4.	0.	0.	6.	0.	0.	0.	0.
AVE	928.	17.	98.	56.	18.	154.	31.	104.	2.	0.	4276.	1186.
TOT	29686.	8147.	43393.	26199.	1547.	57273.	376.	51553.	390.	0.	4276.	7116.
SD	4811.	62.	233.	264.	13.	255.	4.	218.	2.	0.	0.	1023.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	654.	30.	1970.	367.	54.	319.	2.	81.	3.	0.	352.	118.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	32.	1.	13.	4.	6.	12.	1.	3.	0.	0.	352.	43.
TOT	1030.	362.	5603.	1947.	535.	4393.	16.	1635.	76.	0.	352.	255.
SD	115.	1.	95.	19.	8.	32.	0.	8.	0.	0.	0.	39.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 4
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1203

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	22800.	15.	788.	947579.	1742.
FLOW (MGY)	69403.	1.	589.	708510.	3495.
TOTAL CAPITAL COST	84761504.	5077.	543135.	653391104.	3855272.
TOTAL ANNUAL O&M COST	4721033.	419.	47094.	56653936.	252963.
TOTAL ANNUAL COST	15485741.	1064.	116078.	139642016.	734856.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
56653936.	32669552.	50311088.	139634576.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	4721033.	505230.	2197131.	21971312.	1727563.	10.
100000. TO 500000.	486195.	102574.	201870.	14938380.	97227.	74.
50000. TO 100000.	98284.	50052.	68697.	6388809.	13162.	93.
10000. TO 50000.	49789.	10008.	21108.	10427446.	10538.	494.
0. TO 10000.	9994.	419.	5512.	2932529.	2517.	532.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	105951872.	5027460.	35086256.	385948928.	38022688.	11.
1000000. TO 5000000.	4144025.	1005192.	1791937.	175609872.	774531.	98.
500000. TO 1000000.	998590.	500588.	685019.	78777232.	142670.	115.
100000. TO 500000.	494921.	100418.	219130.	158869328.	99422.	725.
0. TO 100000.	99934.	6346.	69371.	17620224.	20513.	254.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	67387.	1829.	6450.	7203.	152.	1757.	83.	2051.	37.	16948.	3828.	2236.
MIN	0.	0.	0.	0.	5.	0.	0.	9.	0.	0.	0.	0.
AVE	2443.	29.	183.	85.	24.	168.	54.	134.	4.	16948.	3828.	940.
TOT	205244.	27105.	164483.	78841.	1952.	76089.	161.	67625.	1770.	16948.	3828.	9400.
SD	10964.	109.	421.	415.	26.	218.	26.	246.	4.	0.	0.	702.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	967.	43.	3025.	562.	343.	263.	16.	125.	25.	21.	442.	90.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	65.	1.	35.	8.	14.	13.	7.	5.	1.	21.	442.	38.
TOT	5445.	1200.	31162.	7769.	1122.	6053.	20.	2481.	558.	21.	442.	380.
SD	187.	3.	185.	35.	42.	27.	8.	12.	2.	0.	0.	28.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 4
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1203

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	22800.	15.	788.	947579.	1742.
FLOW (MGY)	44147.	1.	434.	522257.	2314.
TOTAL CAPITAL COST	41332192.	5071.	386176.	464570112.	1966077.
TOTAL ANNUAL O&M COST	3158657.	419.	35165.	42303776.	171906.
TOTAL ANNUAL COST	8407844.	1063.	84215.	101311168.	417487.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
42303776.	23228496.	35771872.	101304144.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3158657.	596023.	1802083.	14416670.	1065293.	8.
100000. TO 500000.	486195.	100360.	192548.	10590142.	89731.	55.
50000. TO 100000.	99501.	50052.	69537.	5145747.	13908.	74.
10000. TO 50000.	49381.	10002.	20632.	8624269.	10120.	418.
0. TO 10000.	9972.	419.	5450.	3531379.	2374.	648.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	51665232.	5027460.	19457360.	214031040.	17367600.	11.
1000000. TO 5000000.	4144025.	1005192.	1720078.	137606240.	722133.	80.
500000. TO 1000000.	994919.	505899.	700532.	62347344.	147932.	89.
100000. TO 500000.	495560.	100157.	207590.	143444672.	95223.	691.
0. TO 100000.	99934.	6338.	70390.	23369632.	20098.	332.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	29195.	1305.	4806.	4612.	151.	1757.	81.	2051.	20.	10781.	3828.	2236.
MIN	0.	0.	0.	0.	5.	0.	0.	9.	0.	0.	0.	0.
AVE	1108.	22.	146.	61.	24.	158.	52.	127.	3.	10781.	3828.	940.
TOT	93055.	20457.	131151.	57037.	1933.	71448.	156.	64086.	1296.	10781.	3828.	9400.
SD	4773.	79.	319.	278.	26.	217.	25.	225.	3.	0.	0.	702.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	666.	30.	2006.	374.	313.	263.	15.	83.	11.	15.	442.	90.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	46.	1.	24.	6.	13.	12.	6.	4.	1.	15.	442.	38.
TOT	3852.	998.	21779.	5594.	1082.	5549.	19.	2248.	346.	15.	442.	380.
SD	129.	2.	123.	23.	39.	27.	7.	9.	1.	0.	0.	28.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION #
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1203

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	22800.	15.	788.	947579.	1742.
FLOW (MGY)	30745.	0.	332.	399559.	1675.
TOTAL CAPITAL COST	24533520.	4104.	303893.	365583104.	1246813.
TOTAL ANNUAL O&M COST	2292765.	375.	27393.	32953616.	126761.
TOTAL ANNUAL COST	5408521.	896.	65993.	79390064.	282056.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
32953616.	18279152.	28149872.	79382640.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2292765.	600453.	1464739.	10253179.	703919.	7.
100000. TO 500000.	410758.	100382.	187691.	7507633.	87687.	40.
50000. TO 100000.	99175.	50052.	71111.	4195576.	15317.	59.
10000. TO 50000.	49539.	10027.	20728.	7192529.	10333.	347.
0. TO 10000.	9971.	375.	5079.	3808935.	2327.	750.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	30666896.	5027460.	14972755.	134754800.	9725381.	9.
1000000. TO 5000000.	4777005.	1004449.	1734883.	114502336.	858197.	66.
500000. TO 1000000.	991339.	503251.	695133.	55610656.	144478.	80.
100000. TO 500000.	496718.	100240.	199872.	123121136.	94251.	616.
0. TO 100000.	99939.	5129.	67320.	29082336.	20180.	432.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	15385.	996.	3802.	3228.	126.	1757.	73.	2051.	18.	8653.	3828.	2236.
MIN	0.	0.	0.	0.	5.	0.	0.	7.	0.	0.	0.	0.
AVE	607.	17.	118.	47.	21.	147.	47.	114.	2.	8653.	3828.	940.
TOT	50973.	15939.	106441.	43380.	1700.	66432.	141.	57741.	1021.	8653.	3828.	9400.
SD	2526.	60.	255.	207.	21.	211.	23.	204.	2.	0.	0.	702.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	494.	23.	1445.	270.	218.	263.	11.	67.	9.	12.	442.	90.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	35.	1.	18.	5.	10.	11.	5.	4.	1.	12.	442.	38.
TOT	2900.	861.	16009.	4258.	802.	5039.	14.	1992.	248.	12.	442.	380.
SD	96.	1.	89.	17.	27.	26.	5.	8.	1.	0.	0.	28.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 5
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1579

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28600.	5.	814.	1284711.	1836.
FLOW (MGY)	39242.	2.	578.	912386.	2475.
TOTAL CAPITAL COST	67004336.	11838.	507212.	800888064.	2410514.
TOTAL ANNUAL O&M COST	2774672.	756.	49578.	78283072.	193222.
TOTAL ANNUAL COST	10419546.	2259.	114000.	180006512.	479628.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
78283072.	40044400.	61668336.	179995808.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2774672.	504294.	1200615.	37219072.	643137.	31.
100000. TO 500000.	446479.	100740.	209886.	19309520.	98114.	92.
50000. TO 100000.	99293.	50287.	71046.	6109959.	13726.	86.
10000. TO 50000.	49524.	10013.	21000.	11633853.	10225.	554.
0. TO 10000.	9944.	756.	4921.	4015718.	2583.	816.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	83755408.	5185580.	15555507.	466665216.	15531960.	30.
1000000. TO 5000000.	4697895.	1008279.	2042358.	238956000.	966928.	117.
500000. TO 1000000.	988624.	501016.	695504.	92502048.	135310.	133.
100000. TO 500000.	498353.	100153.	206667.	173807360.	97317.	841.
0. TO 100000.	99799.	14797.	63975.	29300736.	22114.	458.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	36891.	1137.	4235.	3905.	84.	1531.	51.	1325.	44.	9637.	0.	26321.
MIN	0.	1.	0.	0.	5.	0.	0.	6.	0.	0.	0.	0.
AVE	1094.	35.	189.	77.	21.	122.	33.	114.	4.	5361.	0.	2413.
TOT	204527.	39388.	224271.	94774.	2533.	70022.	358.	83416.	1797.	26803.	0.	53078.
SD	3791.	97.	386.	275.	16.	150.	6.	168.	4.	3044.	0.	5476.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	589.	27.	1758.	328.	74.	261.	5.	73.	30.	14.	0.	881.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	62.	1.	37.	8.	9.	9.	2.	4.	1.	9.	0.	87.
TOT	11686.	1552.	43696.	9714.	1032.	4965.	20.	3105.	546.	45.	0.	1923.
SD	109.	2.	135.	25.	12.	18.	1.	8.	2.	4.	0.	182.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 5
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1579

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28600.	5.	814.	1284711.	1836.
FLOW (MGY)	39242.	2.	542.	856523.	2462.
TOTAL CAPITAL COST	67004336.	9206.	486030.	767440640.	2410467.
TOTAL ANNUAL O&M COST	2774672.	600.	46481.	73392992.	192344.
TOTAL ANNUAL COST	10419546.	1769.	108213.	170868512.	479000.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
73392992.	38372016.	59092896.	170857904.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2774672.	504298.	1244113.	36079296.	642313.	29.
100000. TO 500000.	446479.	100740.	211187.	18373312.	99267.	87.
50000. TO 100000.	99293.	50412.	71477.	4717499.	14293.	66.
10000. TO 50000.	49985.	10051.	20975.	9690472.	10274.	462.
0. TO 10000.	9944.	600.	4853.	4537345.	2484.	935.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	83755408.	5185580.	15555507.	466665216.	15531960.	30.
1000000. TO 5000000.	4697895.	1008279.	2002280.	228259920.	964551.	114.
500000. TO 1000000.	976248.	502255.	700783.	73582256.	138136.	105.
100000. TO 500000.	497428.	100205.	200837.	155045920.	97720.	772.
0. TO 100000.	99985.	11508.	64281.	35869072.	21787.	558.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	36891.	1137.	4235.	3905.	84.	1531.	51.	1325.	30.	9637.	0.	26321.
MIN	0.	0.	0.	0.	5.	0.	0.	6.	0.	0.	0.	0.
AVE	1091.	33.	173.	71.	21.	118.	33.	113.	3.	5361.	0.	2413.
TOT	204021.	36426.	205578.	87202.	2533.	67542.	358.	82588.	1393.	26803.	0.	53078.
SD	3792.	96.	384.	272.	16.	149.	6.	168.	3.	3044.	0.	5476.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	589.	27.	1758.	328.	74.	261.	5.	73.	18.	14.	0.	881.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	62.	1.	34.	7.	9.	8.	2.	4.	1.	9.	0.	87.
TOT	11590.	1445.	40374.	8806.	1032.	4706.	20.	3073.	378.	45.	0.	1923.
SD	110.	2.	134.	25.	12.	18.	1.	8.	1.	4.	0.	182.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 5
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1579

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	28600.	5.	814.	1284711.	1836.
FLOW (MGY)	27329.	1.	420.	662631.	1795.
TOTAL CAPITAL COST	64726384.	7416.	393466.	621282304.	1986418.
TOTAL ANNUAL O&M COST	2014635.	502.	36897.	58259632.	144442.
TOTAL ANNUAL COST	10090902.	1444.	86873.	137173104.	376114.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
58259632.	31064112.	47838704.	137162448.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2014635.	515801.	1055353.	24273120.	469205.	23.
100000. TO 500000.	486345.	100740.	204245.	16135361.	95797.	79.
50000. TO 100000.	99001.	50412.	72483.	4783849.	13865.	66.
10000. TO 50000.	49924.	10051.	20871.	8578154.	10161.	411.
0. TO 10000.	9964.	502.	4494.	4494220.	2339.	1000.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	80907968.	5159936.	12798566.	319964160.	15060702.	25.
1000000. TO 5000000.	4593561.	1008279.	1932893.	206819616.	897579.	107.
500000. TO 1000000.	987378.	508328.	704907.	71900512.	134812.	102.
100000. TO 500000.	497428.	100066.	198745.	136736576.	97230.	688.
0. TO 100000.	99835.	9270.	62871.	41306240.	21738.	657.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	35206.	868.	3351.	2734.	84.	1531.	51.	1325.	28.	7735.	0.	25800.
MIN	0.	0.	0.	0.	5.	0.	0.	6.	0.	0.	0.	0.
AVE	705.	27.	148.	55.	21.	113.	33.	104.	2.	4302.	0.	2365.
TOT	131836.	29596.	174989.	66982.	2533.	64658.	358.	75713.	1161.	21512.	0.	52027.
SD	2936.	75.	310.	196.	16.	148.	6.	149.	3.	2443.	0.	5367.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	472.	21.	1267.	237.	74.	261.	5.	59.	14.	12.	0.	864.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	48.	1.	26.	6.	9.	8.	2.	4.	1.	8.	0.	86.
TOT	8901.	1253.	30849.	6845.	1032.	4426.	20.	2716.	293.	38.	0.	1886.
SD	84.	2.	98.	18.	12.	18.	1.	6.	1.	4.	0.	179.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 6
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 357

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	14000.	19.	603.	215130.	1146.
FLOW (MGY)	46821.	7.	586.	209377.	3217.
TOTAL CAPITAL COST	22045040.	12524.	341399.	121879600.	1325357.
TOTAL ANNUAL O&M COST	1422552.	860.	25248.	9013627.	104537.
TOTAL ANNUAL COST	4222271.	2957.	68603.	24491360.	266297.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
9013627.	6093979.	9384724.	24492320.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1422552.	521322.	1027652.	3082956.	460832.	3.
100000. TO 500000.	330771.	118726.	195392.	1758529.	69446.	9.
50000. TO 100000.	95850.	51805.	68597.	1234743.	12871.	18.
10000. TO 50000.	46235.	10050.	21021.	1828851.	10971.	87.
0. TO 10000.	9967.	860.	4619.	1108611.	2509.	240.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	27556288.	5669775.	11741644.	46966576.	10573292.	4.
1000000. TO 5000000.	4956188.	1066293.	2050837.	47169264.	1331146.	23.
500000. TO 1000000.	962863.	534112.	727568.	13096222.	114806.	18.
100000. TO 500000.	496098.	100393.	201460.	37068576.	98960.	184.
0. TO 100000.	99588.	15655.	62890.	8049934.	21774.	128.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	10526.	899.	2841.	3933.	266.	2214.	41.	3981.	11.	1947.	0.	0.
MIN	0.	1.	0.	0.	6.	0.	0.	6.	1.	0.	0.	0.
AVE	499.	22.	118.	71.	23.	178.	35.	129.	2.	1947.	0.	0.
TOT	10974.	5253.	29501.	18413.	971.	26403.	175.	28045.	196.	1947.	0.	0.
SD	2240.	73.	256.	311.	40.	310.	5.	351.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	186.	11.	982.	150.	503.	352.	3.	184.	3.	4.	0.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	13.	1.	14.	4.	19.	14.	2.	4.	0.	4.	0.	0.
TOT	275.	175.	3586.	1141.	790.	2110.	10.	885.	37.	4.	0.	0.
SD	39.	1.	68.	15.	77.	40.	1.	15.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 6
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 357

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	14000.	19.	603.	215130.	1146.
FLOW (MGY)	46821.	7.	567.	202243.	3165.
TOTAL CAPITAL COST	22045040.	12524.	333742.	119145952.	1316575.
TOTAL ANNUAL O&M COST	1422552.	860.	24540.	8760657.	103684.
TOTAL ANNUAL COST	4222271.	2957.	66922.	23891200.	264310.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
8760657.	5957297.	9174233.	23892176.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1422552.	1139082.	1280817.	2561634.	200443.	2.
100000. TO 500000.	485575.	118726.	231374.	2082366.	110484.	9.
50000. TO 100000.	95850.	50934.	67607.	1284542.	13424.	19.
10000. TO 50000.	45175.	10041.	20781.	1724831.	10594.	83.
0. TO 10000.	9967.	860.	4538.	1107351.	2433.	244.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	27556288.	5669775.	11633244.	46532976.	10632504.	4.
1000000. TO 5000000.	4956188.	1066293.	1984993.	45654848.	1287540.	23.
500000. TO 1000000.	962863.	534112.	721629.	12989328.	117093.	18.
100000. TO 500000.	496098.	100393.	197114.	35480544.	94550.	180.
0. TO 100000.	98927.	15655.	62697.	8275968.	21398.	132.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	10526.	899.	2841.	3933.	266.	2114.	39.	3981.	11.	1947.	0.	0.
MIN	0.	1.	0.	0.	6.	0.	0.	6.	0.	0.	0.	0.
AVE	499.	21.	116.	69.	23.	173.	34.	126.	2.	1947.	0.	0.
TOT	10974.	5126.	28968.	17802.	960.	25622.	169.	27390.	188.	1947.	0.	0.
SD	2240.	72.	256.	306.	40.	299.	5.	345.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	186.	11.	982.	150.	503.	329.	3.	184.	3.	4.	0.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	13.	1.	18.	4.	18.	14.	2.	4.	0.	4.	0.	0.
TOT	275.	172.	3526.	1102.	776.	2002.	9.	860.	35.	4.	0.	0.
SD	39.	1.	68.	15.	77.	38.	1.	18.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 6
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 357

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	14000.	19.	603.	215130.	1146.
FLOW (MGY)	30784.	6.	408.	145659.	2138.
TOTAL CAPITAL COST	13601761.	9873.	266824.	95256192.	866071.
TOTAL ANNUAL O&M COST	988628.	860.	18849.	6729197.	72848.
TOTAL ANNUAL COST	2716051.	2287.	52735.	18826224.	178786.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
6729197.	4762809.	7334723.	18826720.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	988628.	780627.	884628.	1769255.	147082.	2.
100000. TO 500000.	380689.	109526.	185639.	1485115.	89573.	8.
50000. TO 100000.	88786.	50334.	65366.	653659.	12430.	10.
10000. TO 50000.	47518.	10103.	22107.	1680117.	11825.	76.
0. TO 10000.	9975.	860.	4372.	1141114.	2394.	261.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	17002192.	5827697.	11414944.	22829888.	7901548.	2.
1000000. TO 5000000.	4474366.	1008469.	2020916.	42439248.	1237748.	21.
500000. TO 1000000.	946023.	532680.	722855.	12288532.	144865.	17.
100000. TO 500000.	485889.	100218.	193077.	32050832.	93901.	166.
0. TO 100000.	98442.	12341.	62670.	9463164.	22069.	151.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	5218.	657.	2169.	2601.	220.	1804.	36.	3040.	8.	1610.	0.	0.
MIN	0.	1.	0.	0.	5.	0.	0.	5.	0.	0.	0.	0.
AVE	254.	17.	97.	50.	20.	151.	30.	107.	2.	1610.	0.	0.
TOT	5593.	4084.	24269.	12835.	846.	22400.	152.	23303.	164.	1610.	0.	0.
SD	1109.	54.	200.	208.	33.	248.	4.	270.	1.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	132.	8.	672.	103.	356.	260.	2.	123.	2.	3.	0.	0.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	9.	1.	11.	3.	14.	11.	1.	3.	0.	3.	0.	0.
TOT	207.	153.	2629.	827.	567.	1608.	7.	698.	29.	3.	0.	0.
SD	28.	1.	47.	10.	54.	29.	0.	10.	0.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 7
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1749

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36000.	7.	508.	889309.	1230.
FLOW (MGY)	107829.	3.	946.	1653885.	5581.
TOTAL CAPITAL COST	66683920.	18065.	549450.	960988672.	2856082.
TOTAL ANNUAL O&M COST	3247403.	915.	35191.	61549488.	169246.
TOTAL ANNUAL COST	10224305.	3572.	104976.	183603744.	523349.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
61549488.	48049424.	73996080.	183594992.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3247403.	502207.	1197020.	28728496.	778193.	24.
100000. TO 500000.	492097.	100263.	215425.	12925516.	98272.	60.
50000. TO 100000.	97392.	50933.	69614.	3898377.	13594.	56.
10000. TO 50000.	49678.	10004.	20100.	10311222.	9495.	513.
0. TO 10000.	9988.	915.	5192.	5690611.	2296.	1096.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	83354896.	5125247.	19133344.	612267264.	18585748.	32.
1000000. TO 5000000.	4954611.	1007640.	2010224.	213083744.	1060436.	106.
500000. TO 1000000.	997063.	500590.	687068.	92067088.	143610.	134.
100000. TO 500000.	499217.	100556.	222628.	262032576.	96450.	1177.
0. TO 100000.	99888.	22582.	73048.	21914464.	20173.	300.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	37601.	4064.	2230.	21509.	122.	8209.	63.	7664.	21.	0.	14316.	25427.
MIN	0.	1.	0.	0.	6.	0.	0.	5.	0.	0.	0.	0.
AVE	711.	24.	109.	159.	23.	241.	38.	178.	3.	0.	8232.	3858.
TOT	44805.	24457.	95457.	197440.	5106.	244494.	1021.	233981.	1127.	0.	82315.	30867.
SD	4726.	145.	156.	1139.	16.	540.	9.	532.	3.	0.	3606.	8722.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	443.	50.	441.	695.	150.	2045.	8.	435.	8.	0.	1420.	807.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	23.	1.	11.	7.	9.	23.	2.	6.	1.	0.	705.	123.
TOT	1424.	733.	9346.	8398.	2116.	23667.	61.	7572.	205.	0.	7046.	985.
SD	58.	2.	28.	35.	17.	98.	2.	24.	1.	0.	343.	277.

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WATER USE REGION 7
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1749

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36000.	7.	508.	889309.	1230.
FLOW (MGY)	81468.	3.	625.	1092925.	3454.
TOTAL CAPITAL COST	66683920.	14615.	441015.	771334656.	2312771.
TOTAL ANNUAL O&M COST	3125120.	718.	26780.	46837920.	126259.
TOTAL ANNUAL COST	10224305.	2574.	82793.	144804288.	410985.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
46837920.	38566720.	59392736.	144797376.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3125120.	506185.	1090930.	16363956.	728411.	15.
100000. TO 500000.	479447.	100338.	222613.	12243705.	106522.	55.
50000. TO 100000.	98445.	50691.	71099.	3412775.	15250.	48.
10000. TO 50000.	49678.	10072.	19798.	8988262.	9401.	454.
0. TO 10000.	9970.	718.	4957.	5833865.	2315.	1177.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	83354896.	5195718.	17213056.	413113600.	17941024.	24.
1000000. TO 5000000.	4884566.	1004533.	1961390.	196139040.	1092549.	100.
500000. TO 1000000.	986104.	500314.	689426.	82731136.	138534.	120.
100000. TO 500000.	498866.	100556.	219449.	244466304.	97780.	1114.
0. TO 100000.	99651.	18269.	71177.	27830064.	20880.	391.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	37601.	4064.	2230.	21509.	107.	8209.	63.	6039.	20.	0.	9453.	25427.
MIN	0.	1.	0.	0.	5.	0.	0.	5.	0.	0.	0.	0.
AVE	702.	22.	97.	106.	21.	204.	38.	144.	3.	0.	5435.	3858.
TOT	44255.	22498.	84431.	131431.	4743.	207447.	1016.	189438.	926.	0.	54350.	30867.
SD	4727.	145.	146.	810.	15.	437.	9.	380.	2.	0.	2381.	8722.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	443.	50.	441.	695.	148.	2045.	8.	335.	5.	0.	947.	807.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	22.	1.	9.	5.	8.	17.	2.	4.	0.	0.	470.	123.
TOT	1388.	689.	7935.	5999.	1901.	17497.	60.	5533.	154.	0.	8699.	985.
SD	58.	2.	26.	26.	16.	80.	2.	15.	1.	0.	228.	277.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 7
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1749

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	36000.	7.	508.	889309.	1230.
FLOW (MGY)	65893.	2.	461.	806440.	2647.
TOTAL CAPITAL COST	41356960.	9253.	353037.	617461760.	1693596.
TOTAL ANNUAL O&M COST	2604477.	606.	20764.	36316496.	101534.
TOTAL ANNUAL COST	6857330.	1989.	65603.	114739344.	312446.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
36316496.	30873072.	47544528.	114734096.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2604477.	503414.	1043446.	11477911.	624046.	11.
100000. TO 500000.	450110.	101472.	220904.	9498860.	100413.	43.
50000. TO 100000.	96793.	52031.	71707.	2581460.	13716.	36.
10000. TO 50000.	49752.	10012.	18827.	6871961.	9108.	365.
0. TO 10000.	9997.	606.	4553.	5891071.	2317.	1294.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	51696192.	5454358.	15737613.	299014656.	12860205.	19.
1000000. TO 5000000.	4775635.	1007220.	2110840.	141426304.	1096603.	67.
500000. TO 1000000.	993066.	503460.	692936.	78994704.	144567.	114.
100000. TO 500000.	497712.	100372.	213673.	216023664.	96464.	1011.
0. TO 100000.	99930.	11566.	67776.	36463488.	21271.	538.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	19456.	3469.	1767.	17450.	81.	7299.	57.	5269.	12.	0.	7862.	19112.
MIN	0.	1.	0.	0.	4.	0.	0.	4.	0.	0.	0.	0.
AVE	372.	18.	75.	80.	17.	178.	34.	120.	2.	0.	4520.	2900.
TOT	23465.	17531.	65683.	98664.	3775.	180516.	917.	157831.	729.	0.	45203.	23201.
SD	2445.	123.	111.	639.	11.	379.	8.	318.	2.	0.	1980.	6556.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	329.	42.	318.	574.	103.	1717.	6.	271.	3.	0.	791.	611.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	16.	1.	6.	4.	5.	14.	2.	3.	0.	0.	393.	93.
TOT	992.	595.	5448.	4553.	1228.	14184.	47.	4491.	111.	0.	3926.	746.
SD	43.	2.	18.	21.	11.	66.	1.	12.	0.	0.	191.	210.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 8
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1436

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20500.	6.	704.	1010992.	1607.
FLOW (MGY)	96435.	0.	726.	1042858.	4796.
TOTAL CAPITAL COST	150539616.	3339.	723201.	1038517248.	5820064.
TOTAL ANNUAL O&M COST	6808742.	304.	53367.	76635376.	314476.
TOTAL ANNUAL COST	25927248.	728.	145223.	208540880.	1046323.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
76635376.	51925856.	79965776.	208527008.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	6808742.	676660.	2280439.	36487024.	1970453.	16.
100000. TO 500000.	476720.	100704.	189357.	16284703.	81825.	86.
50000. TO 100000.	99775.	50403.	71522.	7223716.	14281.	101.
10000. TO 50000.	49573.	10027.	21515.	13167052.	10609.	612.
0. TO 10000.	9996.	304.	5603.	3479736.	2516.	621.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	188174512.	5085295.	35438080.	744199680.	50026736.	21.
1000000. TO 5000000.	4788263.	1012275.	1976208.	245049808.	855197.	124.
500000. TO 1000000.	989858.	502638.	722366.	97519424.	148041.	135.
100000. TO 500000.	497594.	100093.	219998.	191178048.	100054.	869.
0. TO 100000.	99947.	4174.	70864.	20338064.	21723.	287.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	127753.	2354.	8050.	10028.	432.	2445.	40.	7343.	35.	0.	5293.	16737.
MIN	0.	0.	0.	0.	7.	0.	0.	9.	0.	0.	0.	0.
AVE	3956.	33.	191.	101.	29.	205.	35.	187.	4.	0.	3249.	3322.
TOT	395575.	34883.	180551.	109938.	3558.	120173.	104.	122259.	2027.	0.	9746.	59791.
SD	17264.	136.	504.	570.	44.	266.	4.	404.	4.	0.	1771.	4501.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1363.	59.	4390.	813.	1309.	524.	2.	538.	17.	0.	520.	607.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	82.	1.	37.	9.	24.	18.	2.	7.	1.	0.	322.	126.
TOT	8206.	1415.	35322.	9543.	2935.	10683.	6.	4713.	577.	0.	966.	2271.
SD	221.	3.	233.	42.	120.	38.	0.	25.	2.	0.	171.	163.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 8
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1436

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20500.	6.	704.	1010992.	1607.
FLOW (MGY)	81138.	0.	535.	768386.	3222.
TOTAL CAPITAL COST	55021232.	3339.	489364.	702726912.	2650645.
TOTAL ANNUAL O&M COST	3813776.	304.	39276.	56399744.	199165.
TOTAL ANNUAL COST	10486918.	728.	101434.	145659488.	530820.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
56399744.	35136336.	54109936.	145646016.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3813776.	507291.	1593913.	23908704.	1129639.	15.
100000. TO 500000.	371124.	100538.	173443.	12140983.	68201.	70.
50000. TO 100000.	99528.	50403.	71468.	6146264.	14379.	86.
10000. TO 50000.	49662.	10029.	20431.	10154263.	10345.	497.
0. TO 10000.	9994.	304.	5282.	4056305.	2373.	768.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	68776528.	5055837.	20549200.	390434816.	20624032.	19.
1000000. TO 5000000.	4832921.	1003880.	1976266.	215413072.	871593.	109.
500000. TO 1000000.	994699.	508719.	728890.	84551296.	153574.	116.
100000. TO 500000.	498980.	100093.	203323.	159811600.	95655.	786.
0. TO 100000.	99673.	4174.	69784.	28332272.	21169.	406.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	37230.	1642.	5265.	8192.	412.	2445.	40.	6869.	35.	0.	5293.	15949.
MIN	0.	0.	0.	0.	7.	0.	0.	9.	0.	0.	0.	0.
AVE	1587.	26.	147.	73.	29.	191.	35.	176.	3.	0.	3249.	3165.
TOT	158718.	2612#.	139005.	79650.	3457.	112273.	104.	115131.	1629.	0.	9746.	56977.
SD	6043.	94.	356.	385.	41.	269.	4.	374.	3.	0.	1771.	4289.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	797.	36.	2428.	852.	1202.	524.	2.	484.	13.	0.	520.	580.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	55.	1.	24.	6.	23.	17.	2.	6.	1.	0.	322.	120.
TOT	5511.	1154.	22591.	6737.	2731.	9874.	6.	4242.	421.	0.	966.	2167.
SD	135.	2.	134.	26.	110.	38.	0.	22.	1.	0.	171.	156.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 8
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1436

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	20500.	6.	704.	1010992.	1607.
FLOW (MGY)	35015.	0.	392.	563121.	1971.
TOTAL CAPITAL COST	29633344.	2673.	364514.	523442176.	1510967.
TOTAL ANNUAL O&M COST	2767396.	283.	29698.	42646512.	136746.
TOTAL ANNUAL COST	6530829.	622.	76000.	109136064.	325158.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
42646512.	26172096.	40305024.	109123632.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2767396.	511689.	1209821.	15727677.	736411.	13.
100000. TO 500000.	371124.	100759.	185020.	9065991.	73520.	49.
50000. TO 100000.	99984.	50403.	72075.	5405655.	14073.	75.
10000. TO 50000.	49685.	10045.	20182.	7992024.	10163.	396.
0. TO 10000.	9993.	283.	4941.	4461942.	2364.	903.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	37041680.	5687112.	16713271.	217272528.	10099351.	13.
1000000. TO 5000000.	4423065.	1012275.	1990174.	199017424.	903890.	100.
500000. TO 1000000.	989858.	506635.	723439.	64386064.	158972.	89.
100000. TO 500000.	496442.	100058.	197548.	137691104.	95622.	697.
0. TO 100000.	99698.	5342.	67157.	36063216.	21262.	537.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	19443.	1105.	4164.	3834.	276.	2445.	39.	3870.	23.	0.	5293.	11988.
MIN	0.	0.	0.	0.	6.	0.	0.	6.	0.	0.	0.	0.
AVE	747.	18.	116.	54.	22.	179.	34.	152.	2.	0.	3249.	2379.
TOT	74699.	19664.	109208.	59227.	2622.	104971.	101.	99186.	1275.	0.	9746.	42827.
SD	2769.	67.	268.	252.	27.	267.	4.	287.	3.	0.	1771.	3224.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	592.	27.	1749.	327.	577.	524.	2.	202.	7.	0.	520.	439.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	39.	1.	17.	5.	12.	16.	2.	5.	1.	0.	322.	91.
TOT	3866.	978.	15642.	5083.	1457.	9234.	5.	3480.	298.	0.	966.	1642.
SD	98.	2.	93.	18.	53.	37.	0.	12.	1.	0.	171.	118.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 9
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 985

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	38000.	5.	567.	558473.	1619.
FLOW (MGY)	11447.	2.	365.	359125.	1018.
TOTAL CAPITAL COST	9284427.	11068.	302949.	298404608.	605359.
TOTAL ANNUAL O&M COST	712235.	666.	25218.	24839632.	59000.
TOTAL ANNUAL COST	1827466.	2071.	63695.	62739248.	132675.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
24839632.	14920229.	22977136.	62736992.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	712235.	621094.	657084.	2628337.	39836.	4.
100000. TO 500000.	386960.	102423.	186512.	8206511.	82505.	44.
50000. TO 100000.	98297.	50201.	67761.	4133451.	13918.	61.
10000. TO 50000.	49615.	10020.	20812.	7450594.	9980.	358.
0. TO 10000.	9963.	666.	4679.	2423628.	2578.	518.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	11605533.	5044770.	6806281.	34031408.	2724679.	5.
1000000. TO 5000000.	4750880.	1009335.	1970288.	151712240.	994208.	77.
500000. TO 1000000.	949583.	502534.	709745.	49682160.	141219.	70.
100000. TO 500000.	498629.	100265.	220703.	119621008.	97546.	542.
0. TO 100000.	99930.	13835.	61817.	17988656.	20232.	291.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1602.	347.	1515.	2209.	137.	1465.	41.	1958.	43.	0.	3653.	3691.
MIN	0.	0.	0.	0.	3.	0.	0.	7.	0.	0.	0.	0.
AVE	190.	25.	115.	56.	31.	211.	36.	139.	5.	0.	3653.	1037.
TOT	7039.	14750.	71525.	31930.	3104.	75083.	218.	81287.	1535.	0.	3653.	8296.
SD	363.	45.	160.	148.	26.	260.	4.	228.	7.	0.	0.	1110.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	166.	9.	435.	82.	146.	216.	3.	56.	17.	0.	373.	144.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	24.	1.	14.	5.	19.	18.	2.	5.	1.	0.	373.	41.
TOT	882.	622.	8488.	2868.	1885.	6254.	12.	2685.	446.	0.	373.	328.
SD	37.	1.	36.	10.	29.	32.	0.	7.	3.	0.	0.	43.

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WATER USE REGION 9
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 985

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	38000.	5.	567.	558473.	1619.
FLOW (MGY)	11447.	2.	325.	319684.	987.
TOTAL CAPITAL COST	9284427.	10037.	276825.	272672768.	592770.
TOTAL ANNUAL O&M COST	712235.	608.	22462.	22124688.	57059.
TOTAL ANNUAL COST	1827466.	1883.	57618.	56753568.	129399.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
22124688.	13633637.	20995792.	56754112.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	712235.	621094.	657084.	2628337.	38836.	4.
100000. TO 500000.	386960.	100160.	180857.	7234288.	80288.	40.
50000. TO 100000.	98297.	50727.	68727.	3298893.	12951.	48.
10000. TO 50000.	49615.	10018.	20418.	6329646.	9916.	310.
0. TO 10000.	9954.	608.	4521.	2635878.	2407.	583.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	11605533.	5044770.	6806281.	34031408.	2724679.	5.
1000000. TO 5000000.	4750880.	1005819.	1969424.	135890320.	1006354.	69.
500000. TO 1000000.	968058.	502534.	703686.	44332208.	148391.	63.
100000. TO 500000.	499856.	100437.	211789.	103988448.	93420.	491.
0. TO 100000.	99908.	12546.	63327.	22607808.	21547.	357.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1602.	342.	1515.	2209.	137.	1465.	41.	1958.	35.	0.	3653.	3691.
MIN	0.	0.	0.	0.	3.	0.	0.	7.	0.	0.	0.	0.
AVE	190.	21.	102.	49.	28.	198.	36.	128.	4.	0.	3653.	1037.
TOT	7026.	12535.	63425.	28391.	2836.	70436.	218.	74639.	1217.	0.	3653.	8296.
SD	363.	42.	151.	142.	25.	255.	4.	218.	6.	0.	0.	1110.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	166.	9.	435.	82.	146.	216.	5.	56.	13.	0.	373.	144.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	24.	1.	12.	4.	16.	16.	2.	4.	1.	0.	373.	41.
TOT	877.	558.	7246.	2494.	1637.	5810.	12.	2469.	324.	0.	373.	328.
SD	37.	1.	33.	9.	27.	31.	0.	7.	2.	0.	0.	43.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 9
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 985

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	38000.	5.	567.	558473.	1619.
FLOW (MGY)	11044.	1.	256.	252603.	822.
TOTAL CAPITAL COST	9284427.	8081.	234971.	231446336.	528531.
TOTAL ANNUAL O&M COST	648345.	506.	18208.	17935120.	47431.
TOTAL ANNUAL COST	1827466.	1532.	48047.	47326752.	112462.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
17935120.	11572316.	17821344.	47328768.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	648345.	548766.	608764.	1826292.	52848.	3.
100000. TO 500000.	325264.	104051.	177993.	5339781.	64761.	30.
50000. TO 100000.	98297.	52632.	69245.	2977522.	13143.	43.
10000. TO 50000.	49688.	10044.	19864.	4966016.	9589.	250.
0. TO 10000.	9934.	506.	4289.	2826719.	2468.	659.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	11605533.	5116908.	7654138.	22962416.	3467791.	3.
1000000. TO 5000000.	4412335.	1001477.	2029343.	107555200.	874483.	53.
500000. TO 1000000.	998817.	507835.	728650.	43718992.	154140.	60.
100000. TO 500000.	494153.	100410.	200763.	89941808.	90855.	448.
0. TO 100000.	99842.	10101.	59698.	25132960.	21887.	421.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1304.	308.	1384.	2209.	96.	1465.	37.	1950.	28.	0.	3653.	3691.
MIN	0.	0.	0.	0.	3.	0.	0.	5.	0.	0.	0.	0.
AVE	135.	16.	84.	40.	23.	177.	33.	108.	3.	0.	3653.	1037.
TOT	5002.	9686.	52048.	22789.	2351.	63151.	197.	63289.	982.	0.	3653.	8296.
SD	281.	32.	120.	127.	19.	243.	3.	192.	4.	0.	0.	1110.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	148.	9.	383.	80.	76.	216.	2.	56.	10.	0.	373.	144.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	19.	1.	9.	4.	11.	14.	2.	4.	1.	0.	373.	41.
TOT	714.	487.	5394.	2017.	1124.	5149.	10.	2099.	242.	0.	373.	328.
SD	32.	1.	25.	8.	16.	31.	0.	6.	1.	0.	0.	43.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 10
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 336

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5200.	6.	370.	124459.	579.
FLOW (MGY)	52416.	4.	1156.	388406.	3828.
TOTAL CAPITAL COST	39291824.	22770.	887396.	298164992.	2962979.
TOTAL ANNUAL O&M COST	1872942.	959.	61785.	20759728.	167850.
TOTAL ANNUAL COST	6434476.	4292.	174486.	58627312.	535563.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
20759728.	14908248.	22958680.	58626656.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1872942.	509459.	914434.	7315474.	494614.	8.
100000. TO 500000.	440389.	103202.	194825.	8961967.	93785.	46.
50000. TO 100000.	99383.	53058.	71415.	1713958.	13028.	24.
10000. TO 50000.	46769.	10181.	19277.	2004809.	8514.	104.
0. TO 10000.	9950.	959.	4964.	764416.	2346.	154.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	49114768.	5363490.	13258165.	198872480.	12215832.	15.
1000000. TO 5000000.	4264273.	1005091.	2020885.	109127808.	830306.	54.
500000. TO 1000000.	933626.	500552.	654686.	22259328.	137866.	34.
100000. TO 500000.	489455.	100121.	229253.	37597456.	102731.	164.
0. TO 100000.	99510.	28463.	70510.	4865197.	24243.	69.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	18152.	1146.	2764.	4629.	295.	3202.	66.	4508.	20.	6946.	5544.	18484.
MIN	0.	1.	0.	0.	6.	0.	0.	6.	1.	0.	0.	0.
AVE	1254.	78.	217.	204.	38.	358.	53.	235.	3.	6946.	5544.	3442.
TOT	35110.	15346.	32750.	51420.	1883.	65447.	372.	55610.	206.	6946.	5544.	27538.
SD	4171.	174.	340.	593.	49.	543.	8.	471.	4.	0.	0.	6094.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	364.	16.	515.	196.	658.	582.	8.	246.	5.	11.	475.	678.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	34.	2.	32.	11.	38.	36.	5.	7.	1.	11.	475.	128.
TOT	962.	323.	4779.	2735.	1907.	6668.	35.	1747.	42.	11.	475.	1026.
SD	80.	2.	68.	25.	99.	81.	1.	20.	1.	0.	0.	223.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 10
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 336

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5200.	6.	370.	124459.	579.
FLOW (MGY)	22538.	4.	696.	233830.	2151.
TOTAL CAPITAL COST	29376864.	19180.	656501.	220584416.	2082921.
TOTAL ANNUAL O&M COST	1185233.	950.	42605.	14315160.	117110.
TOTAL ANNUAL COST	4916093.	3640.	125975.	42327648.	376415.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
14315160.	11029220.	16984976.	42329344.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1185233.	584607.	817553.	4087767.	238013.	5.
100000. TO 500000.	459345.	102396.	201264.	5434117.	113240.	27.
50000. TO 100000.	95505.	50024.	69824.	2304194.	14284.	33.
10000. TO 50000.	49440.	10029.	18300.	1647016.	8467.	90.
0. TO 10000.	9993.	950.	4653.	842157.	2314.	181.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	36721072.	5109412.	11102617.	133231408.	8564458.	12.
1000000. TO 5000000.	3977456.	1022953.	1975686.	81003136.	829330.	41.
500000. TO 1000000.	957217.	517203.	709703.	17742576.	162189.	25.
100000. TO 500000.	480902.	101396.	223014.	37912400.	96096.	170.
0. TO 100000.	99574.	23975.	66394.	5842662.	22799.	88.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	11879.	1045.	1609.	3588.	202.	2990.	47.	2620.	10.	6946.	4188.	15244.
MIN	0.	1.	0.	0.	4.	0.	0.	6.	0.	0.	0.	0.
AVE	604.	61.	141.	142.	26.	306.	38.	181.	2.	6946.	4188.	2845.
TOT	16909.	12051.	21262.	35866.	1301.	55992.	264.	42900.	143.	6946.	4188.	22760.
SD	2297.	145.	217.	435.	32.	483.	5.	339.	2.	0.	0.	5036.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	298.	15.	282.	156.	328.	525.	3.	110.	2.	11.	362.	643.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	23.	1.	17.	8.	18.	30.	2.	5.	0.	11.	362.	107.
TOT	649.	269.	2574.	1949.	879.	5466.	15.	1265.	25.	11.	362.	852.
SD	59.	2.	39.	19.	48.	71.	1.	11.	0.	0.	0.	186.

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WATER USE REGION 10
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 336

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	5200.	6.	370.	124459.	57.
FLOW (MGY)	12148.	3.	482.	161938.	1423.
TOTAL CAPITAL COST	19617280.	12562.	508477.	170848320.	1496072.
TOTAL ANNUAL O&M COST	881817.	671.	31541.	10597923.	86476.
TOTAL ANNUAL COST	3373211.	2358.	96115.	32294708.	273128.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
10597923.	8542415.	13155310.	32295648.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	881817.	529572.	678565.	2035698.	182284.	3.
100000. TO 500000.	477963.	113495.	249398.	3990375.	116779.	16.
50000. TO 100000.	99285.	51885.	71902.	1797538.	15043.	25.
10000. TO 50000.	49969.	10095.	21540.	1874011.	11722.	87.
0. TO 10000.	9782.	671.	4392.	900398.	2416.	205.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	24521600.	5150211.	9076302.	90763024.	5774378.	10.
1000000. TO 5000000.	4734063.	1034456.	1884561.	67844208.	886358.	36.
500000. TO 1000000.	987287.	500719.	682143.	11596429.	157801.	17.
100000. TO 500000.	494184.	100932.	225456.	36298400.	104170.	161.
0. TO 100000.	99617.	15703.	63036.	7060006.	22468.	112.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	6429.	873.	1164.	2832.	135.	2618.	42.	1866.	6.	5668.	3483.	11458.
MIN	0.	1.	0.	0.	3.	0.	0.	6.	0.	0.	0.	0.
AVE	295.	48.	100.	105.	20.	267.	34.	148.	2.	5668.	3483.	2138.
TOT	8253.	9489.	15093.	26425.	1017.	48930.	238.	35030.	112.	5668.	3483.	17108.
SD	1214.	118.	146.	331.	21.	421.	5.	264.	2.	0.	0.	3786.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	221.	12.	204.	125.	158.	431.	2.	55.	1.	9.	302.	427.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	15.	1.	10.	6.	10.	24.	2.	4.	0.	9.	302.	81.
TOT	427.	226.	1532.	1450.	513.	4470.	12.	993.	18.	9.	302.	646.
SD	42.	2.	24.	15.	23.	58.	0.	8.	0.	0.	0.	141.

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WATER USE REGION 11
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 402

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	6200.	6.	373.	149789.	697.
FLOW (MGY)	11233.	0.	364.	146458.	934.
TOTAL CAPITAL COST	6487405.	1766.	422495.	169842848.	864911.
TOTAL ANNUAL O&M COST	934050.	240.	30090.	12096085.	70679.
TOTAL ANNUAL COST	1757950.	472.	83744.	33665136.	177021.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
12096085.	8492141.	13077892.	33666112.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	934050.	934050.	934050.	934050.	0.	1.
100000. TO 500000.	437354.	101267.	206661.	5579847.	70784.	27.
50000. TO 100000.	99476.	50012.	69652.	1810964.	16387.	26.
10000. TO 50000.	48284.	10011.	21549.	2715195.	10455.	126.
0. TO 10000.	9949.	248.	4757.	1056139.	2451.	222.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	8109256.	5074037.	6398678.	31993392.	1545908.	5.
1000000. TO 5000000.	4650511.	1022620.	2384990.	114479520.	1229930.	48.
500000. TO 1000000.	930334.	506701.	691806.	15219741.	134916.	22.
100000. TO 500000.	494909.	100266.	206801.	43428160.	99037.	210.
0. TO 100000.	98967.	2207.	61403.	7184204.	24164.	117.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	2663.	423.	1794.	1078.	136.	1484.	38.	1470.	32.	0.	0.	4620.
MIN	0.	0.	0.	0.	6.	0.	0.	6.	0.	0.	0.	0.
AVE	316.	39.	98.	77.	25.	250.	32.	135.	5.	0.	0.	1827.
TOT	9177.	9280.	18982.	16155.	2232.	37783.	223.	37099.	554.	0.	0.	38357.
SD	520.	76.	162.	192.	19.	330.	5.	183.	6.	0.	0.	1079.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	213.	11.	576.	108.	175.	193.	3.	51.	11.	0.	0.	180.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	34.	1.	11.	5.	14.	23.	2.	4.	1.	0.	0.	74.
TOT	992.	282.	2190.	1123.	1211.	3403.	12.	1190.	136.	0.	0.	1559.
SD	41.	1.	43.	12.	26.	39.	1.	6.	2.	0.	0.	43.

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WATER USE REGION 11
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 402

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	6200.	6.	373.	149789.	697.
FLOW (MGY)	9075.	0.	282.	113204.	793.
TOTAL CAPITAL COST	5186667.	1766.	342289.	137600320.	687121.
TOTAL ANNUAL O&M COST	774778.	248.	24247.	9747471.	58090.
TOTAL ANNUAL COST	1433484.	472.	67716.	27221984.	142186.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
9747471.	6880015.	10595219.	27222704.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	774778.	774778.	774778.	774778.	0.	1.
100000. TO 500000.	437354.	101267.	168679.	4385658.	67091.	26.
50000. TO 100000.	78220.	52147.	62759.	1004136.	8812.	16.
10000. TO 50000.	47202.	10510.	21693.	2516433.	10240.	116.
0. TO 10000.	9738.	248.	4389.	1066550.	2434.	243.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	6483333.	5577258.	6045786.	18137360.	453908.	3.
1000000. TO 5000000.	3956963.	1022620.	2236360.	89454416.	957353.	40.
500000. TO 1000000.	974062.	503475.	743595.	17102688.	170725.	23.
100000. TO 500000.	487639.	100303.	202996.	38366272.	97393.	189.
0. TO 100000.	97291.	2207.	60823.	8941020.	23466.	147.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1925.	361.	1566.	874.	136.	1237.	38.	1470.	24.	0.	0.	3580.
MIN	0.	0.	0.	0.	6.	0.	0.	6.	0.	0.	0.	0.
AVE	227.	31.	89.	60.	22.	209.	32.	109.	4.	0.	0.	1415.
TOT	6587.	7360.	17289.	12473.	1945.	31628.	223.	29948.	430.	0.	0.	29718.
SD	381.	61.	144.	146.	18.	275.	5.	157.	4.	0.	0.	836.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	179.	10.	475.	89.	175.	147.	3.	51.	7.	0.	0.	141.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	27.	1.	10.	4.	11.	17.	2.	3.	1.	0.	0.	58.
TOT	791.	245.	1908.	910.	1004.	2604.	12.	961.	96.	0.	0.	1216.
SD	34.	1.	36.	9.	25.	30.	1.	5.	1.	0.	0.	34.

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WATER USE REGION 11
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 402

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	6200.	6.	373.	149789.	697.
FLOW (MGY)	8770.	0.	220.	88604.	674.
TOTAL CAPITAL COST	4461807.	1766.	276601.	111193648.	533708.
TOTAL ANNUAL O&M COST	564708.	248.	19382.	7791428.	45596.
TOTAL ANNUAL COST	1025649.	472.	54508.	21912304.	110721.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
7791428.	5559682.	8561906.	21913008.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	564708.	564708.	564708.	564708.	0.	1.
100000. TO 500000.	437354.	104808.	148090.	2813712.	76583.	19.
50000. TO 100000.	96163.	54321.	71385.	999394.	17223.	14.
10000. TO 50000.	48084.	10046.	21586.	2352889.	10404.	109.
0. TO 10000.	9797.	248.	4096.	1060800.	2426.	259.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	5577258.	5577258.	5577258.	5577258.	0.	1.
1000000. TO 5000000.	4536817.	1022620.	2024141.	72869088.	874125.	36.
500000. TO 1000000.	966439.	504808.	699849.	17496224.	130964.	25.
100000. TO 500000.	487639.	100369.	194765.	33109968.	91500.	170.
0. TO 100000.	98583.	2207.	58477.	9941023.	22369.	170.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1133.	279.	1244.	818.	136.	1005.	38.	1470.	19.	0.	0.	2691.
MIN	0.	0.	0.	0.	6.	0.	0.	6.	0.	0.	0.	0.
AVE	155.	25.	79.	44.	20.	176.	32.	91.	3.	0.	0.	1064.
TOT	4498.	5822.	15324.	9285.	1762.	26534.	223.	25049.	360.	0.	0.	22338.
SD	251.	48.	122.	108.	18.	224.	5.	138.	3.	0.	0.	628.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	133.	8.	343.	64.	175.	108.	3.	51.	6.	0.	0.	107.
MIN	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.
AVE	21.	1.	8.	3.	10.	13.	2.	3.	1.	0.	0.	44.
TOT	603.	216.	1566.	710.	893.	1985.	12.	811.	75.	0.	0.	921.
SD	26.	1.	26.	7.	25.	22.	1.	5.	1.	0.	0.	26.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 12
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 487

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	15000.	5.	391.	190533.	994.
FLOW (MGY)	20529.	3.	379.	184617.	1456.
TOTAL CAPITAL COST	12246524.	12695.	325230.	158386784.	905113.
TOTAL ANNUAL O&M COST	1643703.	767.	25226.	12285075.	92885.
TOTAL ANNUAL COST	3199011.	2379.	66528.	32399024.	202518.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
12285075.	7919338.	12195776.	32400176.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1643703.	742573.	1193137.	2386275.	637196.	2.
100000. TO 500000.	412383.	104500.	190459.	4380553.	99130.	23.
50000. TO 100000.	95101.	51963.	73185.	1683256.	12545.	23.
10000. TO 50000.	48073.	10004.	21423.	2442180.	10713.	114.
0. TO 10000.	9689.	767.	4286.	1392882.	2104.	325.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	15308155.	5063841.	8422197.	50533184.	3760890.	6.
1000000. TO 5000000.	4989713.	1018789.	2090409.	64802704.	1159137.	31.
500000. TO 1000000.	996108.	503597.	746029.	22380864.	158351.	30.
100000. TO 500000.	478823.	100142.	208870.	48040176.	97632.	230.
0. TO 100000.	99979.	15868.	64360.	12228363.	21435.	190.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	6569.	624.	2483.	1837.	118.	1600.	42.	1430.	15.	4019.	2668.	5352.
MIN	0.	1.	0.	0.	3.	0.	0.	8.	0.	0.	0.	0.
AVE	209.	17.	117.	47.	17.	133.	39.	94.	2.	3415.	2668.	799.
TOT	13972.	4616.	32342.	14725.	1477.	24636.	117.	27965.	288.	6830.	2668.	28751.
SD	844.	48.	208.	167.	18.	214.	4.	188.	2.	855.	0.	986.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	363.	18.	1027.	192.	97.	283.	4.	65.	4.	5.	213.	207.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	18.	1.	17.	4.	8.	10.	3.	3.	0.	5.	213.	32.
TOT	1219.	213.	4722.	1263.	679.	1847.	9.	910.	55.	10.	213.	1146.
SD	50.	1.	70.	13.	17.	30.	1.	7.	1.	1.	0.	38.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 12
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 487

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	15000.	9.	391.	190533.	994.
FLOW (MGY)	18395.	3.	329.	160319.	1329.
TOTAL CAPITAL COST	10703240.	12695.	301726.	146940640.	836568.
TOTAL ANNUAL O&M COST	1492168.	767.	22374.	10895992.	84474.
TOTAL ANNUAL COST	2951479.	2379.	60691.	29556352.	185486.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
10895992.	7347031.	11314423.	29557424.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1492168.	674541.	1083354.	2166709.	578149.	2.
100000. TO 500000.	412383.	109477.	209737.	3146062.	110093.	15.
50000. TO 100000.	96023.	51586.	69827.	1815502.	13594.	26.
10000. TO 50000.	48073.	10004.	20538.	2361817.	10849.	115.
0. TO 10000.	9842.	767.	4273.	1405977.	2112.	329.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	13379050.	5063841.	7891077.	47346464.	3248109.	6.
1000000. TO 5000000.	4989713.	1030590.	1997180.	57918240.	1074352.	29.
500000. TO 1000000.	991593.	500739.	701306.	18233968.	164293.	26.
100000. TO 500000.	478823.	100665.	205683.	47718480.	97970.	232.
0. TO 100000.	99979.	15869.	64231.	12460783.	21347.	194.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	5483.	575.	2314.	1649.	92.	1600.	41.	1430.	15.	3601.	2668.	5352.
MIN	0.	1.	0.	0.	3.	0.	0.	8.	0.	0.	0.	0.
AVE	179.	14.	103.	41.	16.	131.	38.	89.	2.	3060.	2668.	799.
TOT	11969.	4043.	28327.	12808.	1359.	24187.	114.	26313.	283.	6120.	2668.	28751.
SD	710.	43.	184.	155.	14.	213.	4.	175.	2.	766.	0.	986.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	332.	16.	930.	174.	62.	283.	3.	65.	4.	5.	213.	207.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	17.	1.	14.	3.	6.	10.	3.	3.	0.	0.	0.	0.
TOT	1117.	199.	3849.	1093.	541.	1815.	8.	853.	54.	9.	213.	32.
SD	46.	1.	62.	12.	12.	30.	1.	6.	1.	1.	0.	38.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 12
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 487

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	15000.	5.	391.	190533.	994.
FLOW (MGY)	12810.	3.	252.	122529.	1011.
TOTAL CAPITAL COST	7674697.	12695.	260858.	127038064.	695309.
TOTAL ANNUAL O&M COST	1085523.	756.	18097.	8813055.	64741.
TOTAL ANNUAL COST	1979662.	2379.	51224.	24946872.	147941.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
8813055.	6351902.	9781926.	24946880.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1085523.	1085523.	1085523.	1085523.	0.	1.
100000. TO 500000.	491766.	102845.	237587.	2851039.	130177.	12.
50000. TO 100000.	91902.	52172.	67149.	1342985.	11268.	20.
10000. TO 50000.	48426.	10136.	21201.	2035282.	10577.	96.
0. TO 10000.	9751.	756.	4185.	1498287.	2234.	358.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	9593371.	5063841.	7687588.	30750352.	1992582.	4.
1000000. TO 5000000.	4380222.	1030590.	2148469.	53711728.	1106792.	25.
500000. TO 1000000.	999554.	508609.	774550.	17814640.	160015.	23.
100000. TO 500000.	492303.	100102.	200731.	42554944.	95318.	212.
0. TO 100000.	99693.	15868.	62638.	13968205.	21785.	223.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	3071.	439.	1835.	1220.	62.	1441.	37.	1266.	14.	2891.	2362.	5352.
MIN	0.	1.	0.	0.	3.	0.	0.	8.	0.	0.	0.	0.
AVE	126.	12.	84.	31.	14.	120.	34.	77.	2.	2456.	2362.	799.
TOT	8459.	3276.	23197.	9733.	1162.	22114.	103.	22712.	259.	4912.	2362.	28751.
SD	425.	33.	146.	119.	10.	192.	4.	148.	2.	615.	0.	986.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	246.	13.	671.	126.	33.	242.	3.	55.	3.	4.	189.	207.
MIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVE	14.	1.	10.	3.	4.	9.	2.	2.	0.	4.	189.	32.
TOT	937.	178.	2792.	835.	373.	1574.	7.	728.	48.	8.	189.	1146.
SD	35.	1.	45.	9.	7.	26.	1.	5.	1.	1.	0.	38.

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WATER USE REGION 13
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 612

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	12600.	8.	424.	259663.	920.
FLOW (MGY)	469987.	1.	3364.	2058532.	21499.
TOTAL CAPITAL COST	1007273984.	6625.	3487104.	2134107904.	41301152.
TOTAL ANNUAL O&M COST	13023192.	433.	146773.	89824896.	643278.
TOTAL ANNUAL COST	140946944.	1275.	589594.	360831488.	5827946.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
89824896.	106705376.	164326224.	360856320.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	13023192.	501852.	1554622.	62184880.	2043464.	40.
100000. TO 500000.	481396.	103901.	271564.	19552592.	108651.	72.
50000. TO 100000.	97999.	50758.	73179.	3219860.	13541.	44.
10000. TO 50000.	49549.	10046.	21970.	3317418.	11360.	151.
0. TO 10000.	9958.	433.	5090.	1552388.	2572.	305.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	1259092480.	5066823.	44924464.	2380996608.	171672832.	53.
1000000. TO 5000000.	4676370.	1001198.	2515852.	186173120.	1258987.	74.
500000. TO 1000000.	997248.	503993.	664641.	33896672.	127803.	51.
100000. TO 500000.	496428.	100174.	202775.	56776864.	91971.	280.
0. TO 100000.	99959.	8281.	63874.	9836521.	21561.	154.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	933376.	5127.	11186.	38936.	765.	3344.	74.	17886.	30.	10770.	0.	24581.
MIN	0.	0.	0.	0.	8.	0.	0.	10.	0.	0.	0.	0.
AVE	13792.	102.	416.	407.	80.	248.	62.	426.	3.	10770.	0.	4690.
TOT	1337860.	40774.	156886.	172206.	7834.	53826.	311.	146951.	374.	10770.	0.	206339.
SD	94967.	345.	854.	2158.	120.	495.	9.	1365.	3.	0.	0.	5342.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1458.	76.	3696.	1390.	3944.	526.	16.	2459.	11.	15.	0.	911.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	109.	2.	82.	21.	167.	26.	10.	25.	1.	15.	0.	180.
TOT	10525.	855.	30816.	9008.	16372.	5739.	49.	8455.	89.	15.	0.	7901.
SD	181.	5.	248.	81.	465.	73.	4.	145.	1.	0.	0.	200.

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WATER USE REGION 13
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 612

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	12600.	8.	424.	259663.	920.
FLOW (MGY)	75127.	1.	764.	467691.	3595.
TOTAL CAPITAL COST	41570496.	4296.	700591.	428761856.	2614712.
TOTAL ANNUAL O&M COST	2527266.	324.	48196.	29496160.	153388.
TOTAL ANNUAL COST	7806717.	869.	137177.	83952144.	480834.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
29496160.	21438080.	33014640.	83948880.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2527266.	599806.	973029.	9730287.	571584.	10.
100000. TO 500000.	490134.	101186.	206689.	12608015.	95491.	61.
50000. TO 100000.	95969.	50142.	72431.	1665913.	14630.	23.
10000. TO 50000.	49756.	10089.	21493.	3847197.	10028.	179.
0. TO 10000.	9955.	324.	4857.	1646661.	2494.	339.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	51963120.	5368195.	13409645.	281602560.	11689038.	21.
1000000. TO 5000000.	4930840.	1002662.	2462025.	150183536.	1140039.	61.
500000. TO 1000000.	987780.	512196.	718846.	33066928.	140296.	46.
100000. TO 500000.	496428.	100438.	200983.	58687104.	90479.	292.
0. TO 100000.	98585.	5370.	64834.	12448115.	21984.	192.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	24662.	1305.	3376.	6390.	335.	1469.	45.	5502.	15.	4176.	0.	14905.
MIN	0.	0.	0.	0.	6.	0.	0.	10.	0.	0.	0.	0.
AVE	876.	34.	183.	86.	40.	150.	38.	171.	2.	4176.	0.	2844.
TOT	84958.	13398.	68992.	36201.	3878.	32463.	190.	59094.	321.	4176.	0.	125114.
SD	2889.	89.	290.	360.	50.	218.	6.	423.	2.	0.	0.	3239.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	322.	18.	702.	267.	872.	245.	4.	346.	5.	8.	0.	560.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	42.	1.	24.	6.	39.	12.	3.	6.	1.	8.	0.	110.
TOT	4041.	425.	9053.	2506.	3799.	2590.	13.	2137.	69.	8.	0.	4857.
SD	59.	1.	58.	17.	102.	29.	1.	22.	1.	0.	0.	123.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 13
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 612

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	12600.	8.	424.	259663.	920.
FLOW (MGY)	30784.	0.	434.	265579.	1633.
TOTAL CAPITAL COST	19248848.	3477.	466342.	285401088.	1465304.
TOTAL ANNUAL O&M COST	1161824.	290.	31765.	19440384.	90316.
TOTAL ANNUAL COST	3321971.	732.	90992.	55686928.	272907.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
19440384.	14270053.	21975872.	55686304.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1161824.	615914.	786124.	3930621.	236229.	5.
100000. TO 500000.	466652.	102196.	191416.	8613723.	93985.	45.
50000. TO 100000.	96886.	50817.	78542.	1963554.	14279.	25.
10000. TO 50000.	49866.	10104.	20627.	3259040.	9830.	158.
0. TO 10000.	9882.	290.	4418.	1674481.	2350.	379.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	24061056.	5028106.	10067286.	140942016.	6069842.	14.
1000000. TO 5000000.	4809508.	1014334.	2330879.	118874864.	979260.	51.
500000. TO 1000000.	968443.	500238.	681051.	29285200.	132616.	43.
100000. TO 500000.	499571.	100019.	204829.	51821760.	100148.	253.
0. TO 100000.	99937.	4346.	63130.	15845513.	22568.	251.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	6356.	670.	1902.	2652.	224.	1253.	41.	3100.	13.	3351.	0.	11203.
MIN	0.	0.	0.	0.	5.	0.	0.	9.	0.	0.	0.	0.
AVE	375.	22.	133.	48.	29.	129.	34.	120.	2.	3351.	0.	2137.
TOT	36398.	8802.	50051.	20093.	2822.	27918.	171.	41501.	262.	3351.	0.	94043.
SD	975.	50.	191.	160.	33.	182.	5.	250.	2.	0.	0.	2435.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	220.	10.	376.	120.	418.	194.	3.	145.	4.	6.	0.	424.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	28.	1.	15.	4.	20.	9.	2.	4.	0.	6.	0.	84.
TOT	2677.	338.	5719.	1566.	1966.	2059.	11.	1368.	52.	6.	0.	3680.
SD	40.	1.	34.	9.	49.	23.	1.	10.	0.	0.	0.	93.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 14
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 77

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	12000.	16.	592.	45602.	1508.
FLOW (MGY)	3758.	7.	461.	35478.	675.
TOTAL CAPITAL COST	2506495.	23954.	368851.	28401552.	434865.
TOTAL ANNUAL O&M COST	191160.	1500.	33898.	2610161.	45926.
TOTAL ANNUAL COST	479757.	4542.	80743.	6217185.	97777.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2610161.	1420077.	2186918.	6217156.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	191160.	115825.	161513.	1130591.	24684.	7.
50000. TO 100000.	80702.	51593.	64304.	643043.	13118.	10.
10000. TO 50000.	47104.	10662.	22190.	687901.	10683.	31.
0. TO 10000.	9965.	1500.	5126.	148644.	2447.	29.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3133118.	1001374.	1518770.	16706471.	684163.	11.
500000. TO 1000000.	869362.	503804.	673622.	8757087.	113524.	13.
100000. TO 500000.	483935.	100792.	248426.	8943352.	109205.	36.
0. TO 100000.	94601.	29942.	64435.	1095390.	22508.	17.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	263.	727.	565.	34.	1101.	0.	738.	11.	0.	0.	0.
MIN	0.	2.	0.	0.	15.	0.	0.	18.	0.	0.	0.	0.
AVE	0.	39.	176.	68.	24.	268.	0.	162.	3.	0.	0.	0.
TOT	0.	1600.	8263.	4036.	72.	8051.	0.	6331.	49.	0.	0.	0.
SD	0.	60.	197.	109.	10.	241.	0.	148.	3.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	5.	150.	36.	15.	113.	0.	25.	4.	0.	0.	0.
MIN	0.	0.	0.	0.	4.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	27.	7.	9.	22.	0.	5.	1.	0.	0.	0.
TOT	0.	59.	1254.	394.	26.	664.	0.	200.	12.	0.	0.	0.
SD	0.	1.	40.	9.	6.	27.	0.	4.	1.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 14
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 77

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	12000.	16.	592.	45602.	1508.
FLOW (MGY)	3090.	7.	357.	27460.	612.
TOTAL CAPITAL COST	1939824.	23954.	299141.	23033888.	380651.
TOTAL ANNUAL O&M COST	191160.	1500.	27854.	2144748.	43307.
TOTAL ANNUAL COST	365143.	4542.	65845.	5070063.	88873.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2144748.	1151694.	1773608.	5070050.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	191160.	118786.	158020.	948121.	28160.	6.
50000. TO 100000.	80702.	55691.	70724.	424342.	9363.	6.
10000. TO 50000.	45795.	10701.	23540.	564968.	12314.	24.
0. TO 10000.	9828.	1500.	5057.	207331.	2251.	41.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2424780.	1256486.	1724912.	10349473.	469091.	6.
500000. TO 1000000.	965441.	526372.	709999.	9229989.	162559.	13.
100000. TO 500000.	483935.	102066.	211806.	7836821.	104068.	37.
0.. TO 100000.	97759.	29942.	65537.	1376285.	22460.	21.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	199.	727.	391.	28.	895.	0.	651.	10.	0.	0.	0.
MIN	0.	2.	0.	0.	12.	0.	0.	13.	0.	0.	0.	0.
AVE	0.	35.	162.	56.	19.	203.	0.	116.	3.	0.	0.	0.
TOT	0.	1435.	7606.	3293.	58.	6087.	0.	4511.	44.	0.	0.	0.
SD	0.	55.	192.	94.	8.	213.	0.	130.	3.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	5.	150.	36.	10.	95.	0.	21.	4.	0.	0.	0.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	24.	6.	6.	15.	0.	4.	1.	0.	0.	0.
TOT	0.	56.	1136.	332.	17.	452.	0.	141.	11.	0.	0.	0.
SD	0.	1.	39.	9.	4.	22.	0.	4.	1.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 14
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 77

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	12000.	16.	592.	45602.	1508.
FLOW (MGY)	2451.	7.	296.	22795.	555.
TOTAL CAPITAL COST	1504101.	23954.	260619.	20067680.	337072.
TOTAL ANNUAL O&M COST	191160.	1429.	23698.	1824768.	40927.
TOTAL ANNUAL COST	349230.	4542.	56797.	4373375.	81422.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1824768.	1003384.	1545210.	4373361.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	191160.	107382.	160127.	800634.	33491.	5.
50000. TO 100000.	87355.	69041.	77089.	308355.	8510.	4.
10000. TO 50000.	38254.	10243.	20983.	503599.	2483.	24.
0. TO 10000.	9912.	1429.	4822.	212188.	2217.	44.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	1880126.	1256486.	1571909.	9431456.	237942.	6.
500000. TO 1000000.	782617.	538501.	691154.	6220382.	88511.	9.
100000. TO 500000.	484852.	100317.	206098.	7831734.	111595.	38.
0. TO 100000.	98010.	29942.	66718.	1601240.	22743.	24.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	179.	727.	339.	24.	727.	0.	541.	10.	0.	0.	0.
MIN	0.	2.	0.	0.	11.	0.	0.	11.	0.	0.	0.	0.
AVE	0.	31.	143.	48.	17.	177.	0.	98.	3.	0.	0.	0.
TOT	0.	1282.	6735.	2826.	50.	5300.	0.	3834.	40.	0.	0.	0.
SD	0.	52.	186.	86.	7.	176.	0.	107.	3.	0.	0.	0.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	0.	5.	150.	36.	8.	75.	0.	17.	4.	0.	0.	0.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	0.	1.	21.	5.	4.	12.	0.	3.	1.	0.	0.	0.
TOT	0.	51.	976.	291.	13.	364.	0.	120.	10.	0.	0.	0.
SD	0.	1.	38.	9.	3.	17.	0.	3.	1.	0.	0.	0.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 15
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 58

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2010.	3.	292.	16939.	477.
FLOW (MGY)	7296.	5.	610.	35394.	1440.
TOTAL CAPITAL COST	4124562.	24783.	422399.	24499168.	683593.
TOTAL ANNUAL O&M COST	674226.	1196.	51881.	3009080.	113060.
TOTAL ANNUAL COST	1198045.	4445.	105526.	6120482.	197308.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
3009080.	1224958.	1886435.	6120473.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	674226.	674226.	674226.	674226.	0.	1.
100000. TO 500000.	393240.	102360.	259055.	1295275.	109275.	5.
50000. TO 100000.	83841.	65484.	74248.	371239.	8047.	5.
10000. TO 50000.	47869.	10575.	29518.	531323.	12085.	18.
0. TO 10000.	9666.	1196.	4725.	137026.	2575.	29.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	5155702.	5155702.	5155702.	5155702.	0.	1.
1000000. TO 5000000.	2734000.	1055777.	1591580.	15915807.	534440.	10.
500000. TO 1000000.	726388.	521908.	571208.	2856041.	86998.	5.
100000. TO 500000.	482780.	103042.	222897.	5795326.	108456.	26.
0. TO 100000.	99648.	30978.	56325.	901203.	21670.	16.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	1379.	303.	1348.	697.	46.	651.	35.	406.	3.	0.	0.	1035.
MIN	0.	2.	0.	0.	13.	0.	0.	8.	0.	0.	0.	0.
AVE	408.	45.	226.	98.	22.	206.	35.	99.	2.	0.	0.	936.
TOT	1632.	1681.	8124.	3626.	133.	4119.	35.	3261.	17.	0.	0.	1871.
SD	647.	69.	309.	164.	14.	182.	0.	108.	1.	0.	0.	141.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	158.	9.	411.	77.	46.	64.	2.	20.	1.	0.	0.	45.
MIN	0.	0.	0.	0.	3.	0.	0.	1.	0.	0.	0.	0.
AVE	54.	2.	47.	11.	14.	16.	2.	4.	0.	0.	0.	41.
TOT	215.	63.	1709.	410.	82.	324.	2.	119.	3.	0.	0.	81.
SD	69.	2.	90.	19.	18.	19.	0.	4.	0.	0.	0.	6.

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WATER USE REGION 15
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 58

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2010.	3.	292.	16939.	477.
FLOW (MGY)	4905.	5.	437.	25323.	957.
TOTAL CAPITAL COST	2837220.	24783.	345108.	20016272.	512071.
TOTAL ANNUAL O&M COST	476877.	1196.	39732.	2304444.	81943.
TOTAL ANNUAL COST	837204.	4445.	83561.	4846511.	144151.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
2304448.	1000814.	1541252.	4846509.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	476877.	102360.	247293.	1483759.	123614.	6.
50000. TO 100000.	81371.	57165.	68171.	272683.	10047.	4.
10000. TO 50000.	40601.	10406.	23016.	414290.	10255.	18.
0. TO 10000.	9429.	1196.	4457.	133717.	2343.	30.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	3546525.	1359630.	1795031.	14360255.	717166.	8.
500000. TO 1000000.	899527.	726388.	856242.	3424969.	86569.	4.
100000. TO 500000.	482780.	101998.	230894.	6003237.	116941.	26.
0. TO 100000.	99648.	30978.	61599.	1231974.	23819.	20.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	785.	226.	1048.	471.	39.	568.	35.	312.	3.	0.	0.	1035.
MIN	0.	2.	0.	0.	11.	0.	0.	8.	0.	0.	0.	0.
AVE	253.	38.	185.	72.	20.	176.	35.	83.	2.	0.	0.	936.
TOT	1012.	1403.	6644.	2647.	119.	3519.	35.	2751.	15.	0.	0.	1871.
SD	355.	56.	249.	116.	12.	153.	0.	85.	1.	0.	0.	141.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	114.	7.	288.	54.	33.	48.	2.	14.	0.	0.	0.	45.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	41.	2.	35.	8.	11.	12.	2.	3.	0.	0.	0.	41.
TOT	165.	56.	1277.	307.	66.	248.	2.	99.	3.	0.	0.	81.
SD	48.	2.	66.	14.	13.	13.	0.	3.	0.	0.	0.	6.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 15
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 58

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	2010.	3.	292.	16939.	477.
FLOW (MGY)	3416.	4.	315.	18276.	708.
TOTAL CAPITAL COST	2061881.	22153.	281514.	16327791.	418276.
TOTAL ANNUAL O&M COST	348207.	1035.	30796.	1786153.	64716.
TOTAL ANNUAL COST	610066.	3849.	66548.	3859777.	115004.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
1786153.	816390.	1257239.	3859781.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	0.	0.	0.	0.	0.	0.
100000. TO 500000.	348207.	100659.	214771.	1073856.	93365.	5.
50000. TO 100000.	87885.	50685.	71356.	285425.	16686.	4.
10000. TO 50000.	31510.	10406.	18874.	283104.	8059.	15.
0. TO 10000.	8410.	1035.	4229.	143773.	2243.	34.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	0.	0.	0.	0.	0.	0.
1000000. TO 5000000.	2577351.	1106108.	1590979.	11136854.	477449.	7.
500000. TO 1000000.	755967.	705804.	717979.	3589894.	21758.	5.
100000. TO 500000.	413591.	101985.	197600.	4149601.	92359.	21.
0. TO 100000.	97494.	27691.	61336.	1533396.	23919.	25.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	482.	188.	834.	372.	28.	461.	32.	243.	2.	0.	0.	1035.
MIN	0.	1.	0.	0.	10.	0.	0.	0.	0.	0.	0.	0.
AVE	170.	31.	151.	54.	16.	146.	32.	65.	1.	0.	0.	936.
TOT	679.	1152.	5420.	2013.	93.	2926.	32.	2129.	13.	0.	0.	1871.
SD	211.	50.	213.	97.	8.	124.	0.	60.	1.	0.	0.	141.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	84.	6.	208.	85.	18.	35.	2.	11.	0.	0.	0.	45.
MIN	0.	0.	0.	0.	2.	0.	0.	1.	0.	0.	0.	0.
AVE	31.	1.	27.	7.	6.	9.	2.	3.	0.	0.	0.	41.
TOT	126.	49.	981.	241.	39.	188.	2.	77.	2.	0.	0.	81.
SD	36.	2.	55.	12.	7.	10.	0.	2.	0.	0.	0.	6.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 16
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1089

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	22000.	4.	533.	579946.	1315.
FLOW (MGY)	16666.	0.	344.	374776.	1077.
TOTAL CAPITAL COST	14700979.	2353.	388157.	422703104.	979660.
TOTAL ANNUAL O&M COST	1236938.	292.	29104.	31694784.	80621.
TOTAL ANNUAL COST	2928996.	591.	78407.	85385056.	201420.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
31694784.	21135152.	32548112.	85378048.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1236938.	525777.	852469.	5967280.	294722.	7.
100000. TO 500000.	489468.	101716.	194918.	7017065.	90484.	36.
50000. TO 100000.	99660.	50187.	69647.	6198571.	14963.	89.
10000. TO 50000.	49574.	10075.	22302.	9768163.	10186.	438.
0. TO 10000.	9966.	292.	5295.	2747926.	2413.	519.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	18376208.	5681357.	11337340.	102036064.	5125505.	9.
1000000. TO 5000000.	4895670.	1015347.	1907930.	171713776.	959659.	90.
500000. TO 1000000.	982193.	503048.	687710.	99030240.	133526.	144.
100000. TO 500000.	499478.	100153.	236252.	139152608.	107243.	589.
0. TO 100000.	99290.	2941.	64300.	16525111.	20923.	257.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	3674.	378.	2111.	3542.	164.	1966.	43.	2726.	12.	1960.	5089.	9541.
MIN	0.	0.	0.	0.	5.	0.	0.	11.	0.	0.	0.	0.
AVE	180.	20.	128.	55.	27.	207.	37.	153.	3.	1715.	4679.	2089.
TOT	14947.	15185.	79178.	40120.	2920.	103296.	262.	98484.	760.	3830.	14037.	50127.
SD	485.	36.	166.	224.	23.	236.	4.	235.	2.	346.	710.	2208.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	183.	7.	678.	164.	197.	276.	3.	113.	8.	4.	683.	364.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	19.	1.	15.	5.	13.	16.	2.	5.	1.	4.	629.	82.
TOT	1601.	730.	9223.	3344.	1446.	8062.	14.	3239.	169.	8.	1888.	1974.
SD	30.	1.	37.	12.	25.	29.	0.	9.	1.	1.	93.	84.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 16
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1089

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	22000.	4.	533.	579946.	1315.
FLOW (MGY)	16666.	0.	304.	331031.	1063.
TOTAL CAPITAL COST	14700979.	2353.	357383.	389189632.	973112.
TOTAL ANNUAL O&M COST	1236938.	292.	26479.	28836032.	80080.
TOTAL ANNUAL COST	2928996.	591.	71873.	78269536.	200127.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
28836032.	19459472.	29967584.	78263088.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1236938.	525777.	852469.	5967280.	294722.	7.
100000. TO 500000.	489468.	103765.	199916.	6397303.	92578.	32.
50000. TO 100000.	99113.	50092.	67557.	4796557.	14262.	71.
10000. TO 50000.	49574.	10009.	21032.	8896557.	10412.	423.
0. TO 10000.	9966.	292.	5004.	2782373.	2380.	556.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	18376208.	5681357.	11337340.	102036064.	5125505.	9.
1000000. TO 5000000.	4895670.	1012156.	1902076.	152166128.	987608.	80.
500000. TO 1000000.	992309.	501252.	690370.	75250352.	136528.	109.
100000. TO 500000.	497698.	100153.	229795.	139025792.	104573.	605.
0. TO 100000.	99290.	2941.	63216.	18079840.	21053.	286.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	3674.	346.	2111.	3542.	164.	1966.	43.	2726.	12.	1960.	5089.	9541.
MIN	0.	0.	0.	0.	5.	0.	0.	11.	0.	0.	0.	0.
AVE	180.	19.	120.	49.	26.	184.	37.	136.	2.	1715.	4679.	2089.
TOT	14947.	14132.	73991.	35706.	2806.	91605.	262.	87486.	705.	3430.	14037.	50127.
SD	485.	33.	161..	222.	24.	226.	4.	230.	2.	346.	710.	2208.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	183.	7.	678.	164.	197.	276.	3.	113.	8.	8.	683.	368.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	19.	1.	14.	4.	13.	14.	2.	4.	1.	4.	629.	82.
TOT	1601.	703.	8397.	2943.	1387.	6882.	14.	2888.	153.	8.	1888.	1974.
SD	30.	1.	36.	12.	25.	28.	0.	8.	1.	1.	93.	84.

SD OR S.D. REPRESENTS STANDARD DEVIATION. - THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 16
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 1089

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	22000.	4.	533.	579946.	1315.
FLOW (MGY)	12743.	0.	218.	237779.	757.
TOTAL CAPITAL COST	14700979.	2353.	301600.	328442368.	866878.
TOTAL ANNUAL O&M COST	1017048.	292.	20779.	22627920.	64959.
TOTAL ANNUAL COST	2603061.	591.	59087.	64345952.	172484.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
22627920.	16422117.	25290048.	64340080.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1017048.	538860.	810912.	4054561.	205471.	5.
100000. TO 500000.	489468.	101008.	190423.	5141416.	94071.	27.
50000. TO 100000.	99802.	50005.	65489.	2750519.	14312.	42.
10000. TO 50000.	49009.	10057.	20211.	7518540.	9798.	372.
0. TO 10000.	9991.	292.	4924.	3166174.	2475.	643.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	18376208.	5681357.	10887494.	87099952.	4554546.	8.
1000000. TO 5000000.	4895670.	1013609.	1867851.	113938912.	896178.	61.
500000. TO 1000000.	977296.	501252.	703878.	56310240.	139616.	80.
100000. TO 500000.	499246.	100153.	222719.	130736184.	100991.	587.
0. TO 100000.	99663.	2941.	63833.	22532976.	22980.	353.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	3674.	254.	1376.	2718.	110.	1695.	43.	2294.	9.	1960.	4282.	9541.
MIN	0.	0.	0.	0.	4.	0.	0.	7.	0.	0.	0.	0.
AVE	156.	15.	97.	36.	20.	158.	37.	110.	2.	1715.	3937.	2089.
TOT	12964.	11081.	60240.	26012.	2168.	78902.	262.	70879.	606.	3430.	11811.	50127.
SD	473.	25.	123.	166.	16.	193.	4.	182.	2.	346.	597.	2200.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	183.	7.	370.	129.	95.	222.	3.	89.	3.	4.	577.	364.
MIN	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
AVE	17.	1.	10.	3.	7.	11.	2.	4.	0.	4.	532.	82.
TOT	1413.	625.	6012.	2206.	816.	5514.	14.	2330.	123.	8.	1595.	1974.
SD	30.	1.	23.	9.	12.	22.	0.	6.	0.	1.	79.	84.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 17
FLOW AT OBSERVED 1968 LEVEL
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 450

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	31000.	15.	468.	210695.	1662.
FLOW (MGY)	105627.	6.	1946.	875628.	8891.
TOTAL CAPITAL COST	52907440.	22206.	1295130.	582808576.	4273298.
TOTAL ANNUAL O&M COST	3956620.	1434.	94418.	42486288.	336696.
TOTAL ANNUAL COST	10675863.	4264.	258899.	116504464.	871068.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
42486288.	29140416.	44876224.	116502928.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	3956620.	538955.	1539488.	23092320.	1089630.	15.
100000. TO 500000.	452282.	101703.	194775.	9738763.	95422.	50.
50000. TO 100000.	97956.	51639.	67522.	2970975.	13485.	44.
10000. TO 50000.	49874.	10046.	26045.	6120469.	10574.	235.
0. TO 10000.	9791.	1434.	5328.	564820.	2171.	106.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	66134288.	5136670.	19986656.	419719936.	15986956.	21.
1000000. TO 5000000.	4959988.	1041225.	2023961.	157868960.	1007450.	78.
500000. TO 1000000.	999361.	508154.	723722.	107110928.	133035.	148.
100000. TO 500000.	497758.	100886.	252692.	40936112.	118459.	162.
0. TO 100000.	99104.	27758.	70548.	2892484.	21129.	41.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	953.	269.	1763.	21838.	109.	6101.	60.	8930.	18.	11110.	16679.	2657.
MIN	0.	1.	0.	0.	6.	0.	0.	18.	0.	0.	0.	0.
AVE	161.	34.	222.	450.	26.	469.	53.	387.	4.	7928.	8102.	1338.
TOT	2417.	6758.	31129.	128640.	866.	137889.	105.	136839.	216.	47570.	81022.	9368.
SD	248.	49.	288.	1970.	21.	711.	11.	898.	3.	2735.	4371.	703.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	130.	8.	539.	687.	85.	1882.	5.	565.	8.	17.	1735.	108.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	23.	1.	37.	22.	13.	54.	4.	15.	1.	13.	830.	55.
TOT	341.	248.	5190.	6362.	416.	15739.	8.	5373.	51.	76.	8298.	383.
SD	33.	1.	74.	69.	20.	155.	2.	52.	1.	4.	463.	28.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 17
FLOW LESS THAN OR EQUAL TO MEDIAN OF WATER USE REGIONS
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 450

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	31000.	15.	468.	210695.	1662.
FLOW (MGY)	45250.	4.	851.	382869.	3811.
TOTAL CAPITAL COST	27730240.	18786.	734676.	330604032.	2267610.
TOTAL ANNUAL O&M COST	2068368.	1189.	50421.	22689632.	174884.
TOTAL ANNUAL COST	5590107.	3585.	143729.	64677920.	459128.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
22689632.	16530200.	25456496.	64676320.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	2068368.	526845.	1031237.	10312369.	552849.	10.
100000. TO 500000.	423465.	104496.	184566.	5352418.	78296.	29.
50000. TO 100000.	98924.	50137.	76440.	1987446.	14191.	26.
10000. TO 50000.	49855.	10020.	19559.	4029156.	9868.	206.
0. TO 10000.	9968.	1189.	5638.	1009236.	2737.	179.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	34662800.	6671221.	13406343.	201095152.	8476502.	15.
1000000. TO 5000000.	4591495.	1053844.	2112698.	92958736.	903753.	44.
500000. TO 1000000.	933277.	500127.	681666.	42944960.	130555.	63.
100000. TO 500000.	490012.	101129.	274788.	71998560.	110929.	262.
0. TO 100000.	98016.	23483.	64796.	4276550.	20548.	66.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	373.	196.	895.	9470.	97.	3816.	49.	5177.	18.	5458.	9668.	2657.
MIN	0.	1.	0.	0.	6.	0.	0.	12.	0.	0.	0.	0.
AVE	116.	26.	159.	196.	22.	291.	43.	224.	3.	3895.	4696.	1338.
TOT	1736.	5006.	22305.	56043.	714.	85590.	86.	79260.	175.	23368.	46961.	9368.
SD	127.	36.	189.	855.	18.	449.	9.	522.	3.	1344.	2533.	703.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	72.	5.	207.	321.	65.	937.	3.	243.	8.	10.	1019.	108.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	18.	1.	22.	11.	9.	27.	3.	8.	1.	7.	487.	55.
TOT	275.	208.	3081.	3005.	287.	7799.	5.	2688.	41.	45.	4873.	383.
SD	21.	1.	38.	32.	14.	77.	1.	23.	1.	2.	272.	28.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

WATER USE REGION 17
FLOW OF LEAST EFFICIENT TWO-THIRDS OF WATER USE REGIONS MODIFIED
1968 FLOW CONDITIONS (1967 DOLLARS)

TOTAL NUMBER OF MANUFACTURING PLANTS... 450

	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.
MANUFACTURING EMPLOYMENT	31000.	15.	468.	210695.	1662.
FLOW (MGY)	33981.	3.	651.	292830.	2861.
TOTAL CAPITAL COST	22402384.	16220.	618476.	278314240.	1840935.
TOTAL ANNUAL O&M COST	1668232.	1014.	40794.	18357488.	140113.
TOTAL ANNUAL COST	4513334.	3086.	119341.	53703648.	371519.

ANNUAL COST OF WASTE TREATMENT

O&M	REPLACEMENT	INTEREST	TOTAL
18357488.	13915711.	21430176.	53703360.

DISTRIBUTION OF OPERATION AND MAINTENANCE COST

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 500000.	1668232.	560223.	924841.	7398725.	447337.	8.
100000. TO 500000.	468091.	102812.	186718.	4667942.	99408.	25.
50000. TO 100000.	89950.	50485.	70285.	1757132.	11934.	25.
10000. TO 50000.	47844.	10020.	18872.	3359234.	8570.	178.
0. TO 10000.	9968.	1014.	5490.	1174858.	2785.	214.

DISTRIBUTION OF INVESTMENT REQUIREMENTS

COST RANGE	MAXIMUM	MINIMUM	AVERAGE	TOTAL	S.D.	NUMBER
> 5000000.	28002976.	5409001.	10902396.	163535952.	6831693.	15.
1000000. TO 5000000.	4385741.	1002785.	1874120.	74964832.	774897.	40.
500000. TO 1000000.	990183.	500791.	678686.	33934288.	128585.	50.
100000. TO 500000.	490069.	100429.	276969.	69242272.	107570.	250.
0. TO 100000.	98961.	20275.	65497.	6222245.	22019.	95.

DISTRIBUTION OF TOTAL CAPITAL COST FOR TREATMENT ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	371.	148.	785.	7141.	65.	3256.	45.	4307.	9.	4380.	8040.	2657.
MIN	0.	1.	0.	0.	6.	0.	0.	10.	0.	0.	0.	0.
AVE	95.	20.	125.	150.	18.	259.	39.	193.	2.	3126.	3906.	1338.
TOT	1425.	3866.	17561.	42760.	595.	76267.	78.	68453.	131.	18755.	39058.	9368.
SD	106.	27.	154.	644.	12.	381.	8.	433.	2.	1078.	2107.	703.

DISTRIBUTION OF ANNUAL O&M TREATMENT COSTS ($ 1000)

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
MAX	54.	5.	171.	248.	31.	740.	2.	185.	3.	8.	851.	108.
MIN	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.
AVE	16.	1.	16.	8.	6.	22.	2.	6.	0.	6.	407.	55.
TOT	240.	180.	2211.	2357.	200.	6416.	4.	2232.	26.	38.	4071.	383.
SD	17.	1.	29.	25.	8.	61.	1.	17.	1.	2.	227.	28.

SD OR S.D. REPRESENTS STANDARD DEVIATION. THE DATA DISTRIBUTION USED IS HIGHLY SKEWED.

Regional Industrial Water Use Per Employee By SIC Code

A central component of the industrial cost model to define required treatment by industry was a mechanism to relate industrial activity as measured by types, employment sizes, and locations of industries to waste generated by these industries. Waste generation was measured in terms of quantity (flow) by an analysis of The 1967 Census of Manufactures, Water Use In Manufacturing to determine water use per manufacturing employee discriminated by type of industry (4-digit SIC code) and location (water use region--elsewhere defined).

Many industries do not use a significant amount of water in their process. These industries were not included in the analysis. Where a four-digit or two-digit code is missing, an insignificant amount of process water use is indicated for the industry or major industry group.

In a number of cases regional water use per employee data was not available, therefore data from other regions was substituted. The following table shows all cases where analysis was made using substitute data.

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INTRODUCTION TO WATER USE PER EMPLOYEE TABLES

In a number of cases regional data unavailability made necessary the use of data from other regions where data was available. The following table shows all cases where analysis was made using substitute data from other regions.

SIC	TYPE OF INDUSTRY	DATA FROM REGION		SUBSTITUTED FOR THESE REGIONS
		Number	Name	# Name # Name # Name # Name # Name # Name # Name # Name
20	Food and Kindred Products	ALL DATA PRESENT		
22	Textile Mill Products	1	New. Eng.	17 Pac. N.W
		4	E. Gr. Lks.	8 W. Gr. Lk.
		9	Upp. Miss.	13 W. Gf. 12 Ark. 11 Mo.
		16	Calif.	14 Colo. 15 Gr. Bn.
24	Lumber and Wood Products, Except Furniture	5	Oh. Riv.	1 N. Eng. 2 Del/Hud. 3 Ches. Bay
		8	W. Gr. Lk.	9 Upp. Miss.
		7	S.E.	6 Cumb/Tenn.
		12	Ark. W&R	11 Mo.
		16	Calif.	15 Gr. Bn. 14 Colo.
26	Paper and Allied Products	11	Mo.	14 Colo. 15 Gr. Bn.
28	Chemicals and Allied Products	14	Colo.	15 Gr. Bn.
29	Petroleum Refining and Related Industries	2	Del/Hud.	3 Ches.Bay 1 New Eng.
		5	Oh. Riv.	6 Cumb/Tenn.
		16	Calif.	14 Colo. 15 Gr. Bn.
30	Rubber and Miscellaneous Plastics	1	New. Eng.	17 Pac. N.W.
		5	Oh. Riv.	6 Cumb/Tenn.
		7	S.E.	13 W. Gf.
		12	Ark. W&R	11 Mo. 14 Colo. 15 Gr. Bn.
31	Leather and Leather Products	8	W. Gr. Lks.	4 E. Gr. Lks.
		5	Oh. Riv.	6 Cumb/Tenn.7 S.W. 9 Upp. Miss. 10 Low Miss. 11 Mo. 12 Ark. 13 W. Gf. 17 Pac. N.W.
		16	Calif.	14 Colo. 15 Gr.Bn.
32	Stone, Clay, Glass, and Concrete	ALL DATA PRESENT		
33	Primary Metal Industries	7	S.E.	10 Low Miss.
34	Fabricated Metal Products, Except Ordinance, Machinery, and Transportation Equipment	1	New. Eng.	17 Pac. N.W.
		12	Ark. W&R	14 Colo. 15 Gr. Bn.
35	Machinery, Except Electrical	1	New Eng.	17 Pac. N.W.
		11	Mo.	14 Colo. 15 Gr. Bn.
36	Electrical Machinery, Equipment, and Supplies	1	New Eng.	17 Pac. N.W.
		7	S.E.	13 W. Gr. Lk.
		11	Mo.	14 Colo. 15 Gr. Bn.
37	Transportation Equipment	7	S.E.	10 Low Miss.
		12	Ark. W&R	11 Mo. 14 Colo. 15 Gr. Bn.

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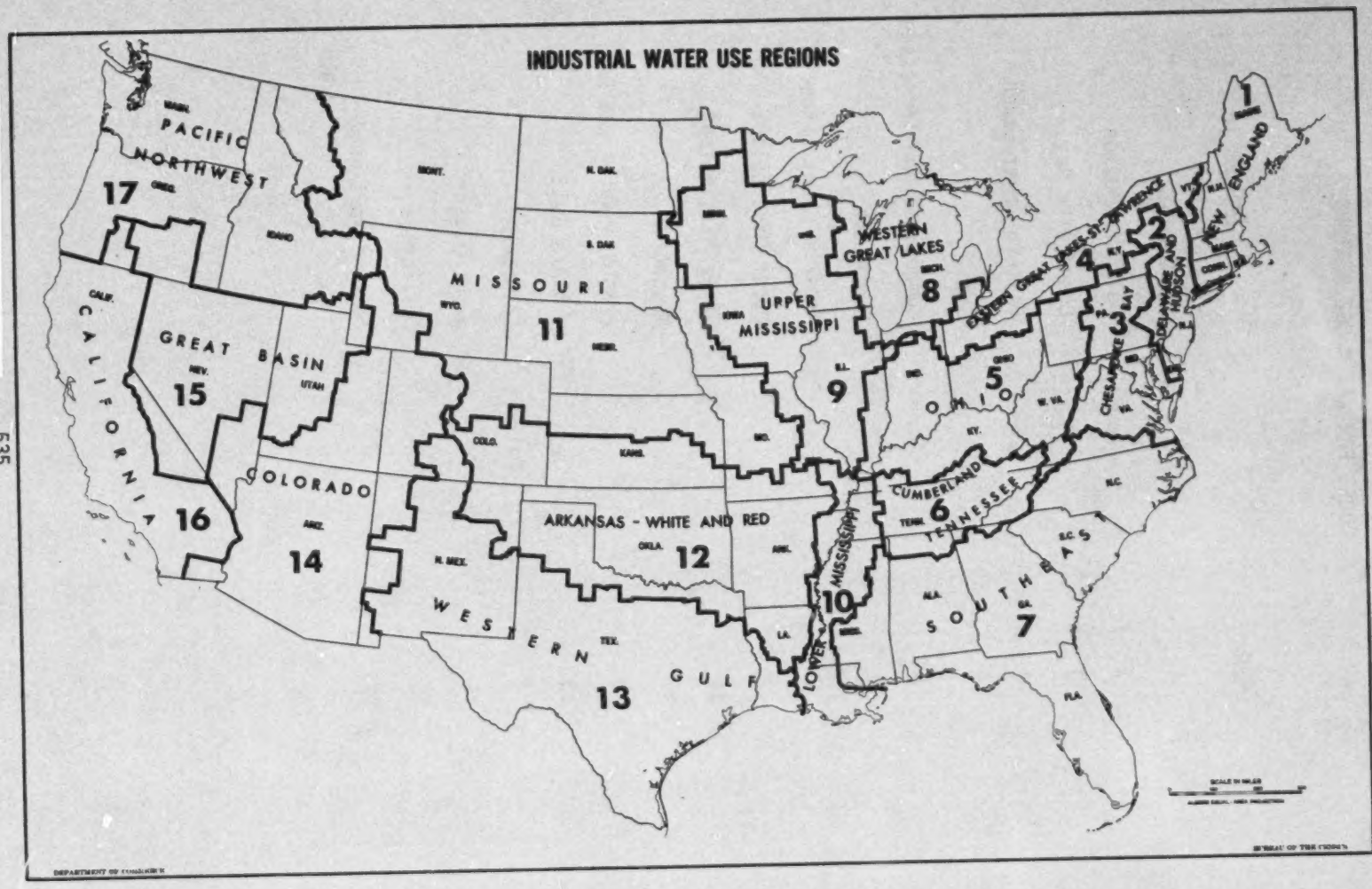

CODES FOR WATER USE REGIONS

Code	Region
1	New England
2	Delaware Hudson
3	Chesapeake Bay
4	Eastern Great Lakes
5	Ohio
6	Cumberland and Tennessee
7	Southeast
8	Western Great Lakes
9	Upper Mississippi
10	Lower Mississippi
11	Missouri
12	Arkansas-White and Red
13	Western Gulf
14	Colorado
15	Great Basin
16	California
17	Pacific Northwest

TABLE 1A

WATER USE PER EMPLOYEE (MILLION GALLONS PER YEAR) FOR EACH WATER USE REGION AND SIC CODE

SIC	REGION NUMBER *1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
20	0.316	0.514	0.305	0.545	0.353	0.457	0.636	0.515	0.699	0.740	0.959	0.641	0.705	1.250	0.658	0.892	1.221
201	0.255	0.415	0.246	0.286	0.285	0.234	0.513	0.415	0.564	0.597	0.612	0.328	0.361	0.640	0.531	0.513	0.625
2011	0.253	0.412	0.244	0.300	0.283	0.246	0.509	0.412	0.560	0.592	0.643	0.345	0.379	0.673	0.527	0.540	0.657
2013	0.137	0.224	0.133	0.173	0.154	0.141	0.276	0.224	0.304	0.322	0.369	0.198	0.218	0.386	0.286	0.310	0.377
2015	0.259	0.421	0.249	0.289	0.289	0.237	0.520	0.421	0.572	0.605	0.620	0.332	0.365	0.648	0.538	0.520	0.633
202	0.135	0.220	0.130	0.233	0.151	0.240	0.271	0.220	0.299	0.316	0.410	0.297	0.427	0.812	0.281	0.381	0.667
2021	0.184	0.300	0.178	0.318	0.206	0.328	0.371	0.300	0.408	0.431	0.559	0.405	0.583	2.061	0.384	0.520	0.910
2022	0.093	0.160	0.095	0.169	0.110	0.175	0.198	0.160	0.217	0.230	0.298	0.216	0.311	0.836	0.205	0.278	0.486
2023	0.167	0.271	0.161	0.287	0.186	0.297	0.335	0.271	0.369	0.390	0.506	0.366	0.527	1.864	0.347	0.471	0.823
2024	0.132	0.215	0.127	0.227	0.148	0.235	0.266	0.215	0.292	0.309	0.401	0.290	0.351	0.693	0.275	0.373	0.652
2026	0.133	0.216	0.128	0.229	0.148	0.204	0.267	0.216	0.294	0.311	0.403	0.287	0.315	0.559	0.276	0.375	0.547
203	0.390	0.635	0.376	0.425	0.436	0.347	0.785	0.635	0.863	0.914	0.909	0.487	0.536	0.951	0.813	0.763	0.929
2031	0.179	0.292	0.173	0.252	0.200	0.206	0.361	0.292	0.397	0.420	0.540	0.289	0.318	0.564	0.373	0.453	0.551
2032	0.306	0.497	0.295	0.333	0.343	0.273	0.615	0.497	0.676	0.715	0.713	0.382	0.420	0.746	0.636	0.599	0.729
2033	0.352	0.540	0.339	0.331	0.393	0.271	0.708	0.562	0.751	0.824	0.709	0.380	0.418	0.741	0.733	0.595	0.724
2034	0.600	0.650	0.579	0.399	0.503	0.326	0.862	0.678	0.905	1.405	0.854	0.458	0.503	0.893	1.149	0.717	0.872
2035	0.145	0.236	0.140	0.188	0.162	0.154	0.292	0.236	0.321	0.340	0.402	0.216	0.237	0.421	0.302	0.338	0.411

TABLE 1A

WATER USE PER EMPLOYEE (MILLION GALLONS PER YEAR) FOR EACH WATER USE REGION AND SIC CODE

SIC	REGION NUMBER *1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
2036	0.091	0.149	0.088	0.158	0.102	0.152	0.184	0.149	0.202	0.214	0.277	0.201	0.234	0.416	0.150	0.258	0.406
2037	0.531	0.865	0.512	0.701	0.594	0.574	1.069	0.865	1.176	1.244	1.502	0.805	0.885	1.570	1.106	1.260	1.535
204	0.226	0.367	0.217	0.389	0.252	0.402	0.454	0.367	0.499	0.528	0.685	0.496	0.713	1.999	0.470	0.637	1.114
2041	0.084	0.136	0.081	0.144	0.093	0.149	0.168	0.136	0.185	0.196	0.254	0.184	0.264	0.796	0.174	0.236	0.413
2042	0.126	0.204	0.121	0.216	0.140	0.224	0.253	0.204	0.278	0.294	0.381	0.276	0.397	0.803	0.261	0.355	0.620
2043	0.037	0.059	0.035	0.063	0.041	0.065	0.073	0.059	0.081	0.085	0.111	0.080	0.115	0.404	0.076	0.103	0.180
2046	0.453	0.738	0.437	0.781	0.507	0.807	0.912	0.738	1.003	1.061	1.376	0.996	1.434	4.291	0.944	1.280	2.240
205	0.031	0.050	0.030	0.039	0.034	0.032	0.062	0.050	0.068	0.072	0.084	0.045	0.050	0.088	0.064	0.071	0.086
2051	0.024	0.040	0.023	0.028	0.027	0.023	0.049	0.040	0.054	0.057	0.060	0.032	0.035	0.063	0.051	0.050	0.061
2052	0.022	0.036	0.021	0.038	0.024	0.039	0.044	0.036	0.048	0.051	0.066	0.048	0.069	0.138	0.046	0.062	0.108
206	1.650	2.684	1.590	2.842	1.844	2.937	3.318	2.685	3.649	3.862	5.006	3.625	5.041	8.942	3.434	4.657	8.149
2061	5.031	8.185	4.851	8.668	5.623	7.421	10.120	8.190	11.130	11.778	15.269	10.408	11.447	20.306	10.414	14.205	19.843
2062	0.200	0.326	0.193	0.345	0.224	0.357	0.403	0.326	0.443	0.469	0.608	0.440	0.633	2.239	0.417	0.565	0.989
2063	1.694	2.756	1.634	1.789	1.894	1.464	3.408	2.758	3.748	3.966	3.831	2.053	2.258	4.006	3.527	3.215	3.915
207	0.072	0.117	0.069	0.124	0.080	0.128	0.145	0.117	0.159	0.168	0.218	0.158	0.227	0.711	0.150	0.203	0.355
2071	0.083	0.135	0.080	0.119	0.092	0.097	0.166	0.135	0.183	0.194	0.251	0.136	0.150	0.266	0.172	0.213	0.260
208	0.249	0.405	0.240	0.429	0.278	0.383	0.501	0.406	0.551	0.583	0.756	0.538	0.562	1.049	0.519	0.703	1.025

TABLE 1A

WATER USE PER EMPLOYEE (MILLION GALLONS PER YEAR) FOR EACH WATER USE REGION AND SIC CODE

	REGION NUMBER																
SIC	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
2082	0.304	0.495	0.293	0.507	0.340	0.415	0.612	0.495	0.673	0.712	0.923	0.582	0.640	1.136	0.633	0.859	1.110
2083	2.608	4.086	2.514	2.505	2.915	2.049	5.246	4.245	5.686	6.105	5.364	2.875	3.162	5.608	5.429	4.502	5.480
2084	0.521	0.848	0.503	0.592	0.583	0.485	1.049	0.849	1.154	1.271	1.268	0.680	0.747	1.326	1.086	1.064	1.296
2085	0.053	0.086	0.051	0.091	0.059	0.094	0.106	0.086	0.117	0.123	0.160	0.116	0.167	0.589	0.110	0.149	0.260
2086	0.100	0.163	0.097	0.114	0.112	0.093	0.202	0.163	0.222	0.235	0.243	0.130	0.143	0.254	0.209	0.204	0.249
2087	0.066	0.108	0.064	0.114	0.074	0.118	0.134	0.108	0.147	0.155	0.202	0.146	0.210	0.463	0.138	0.187	0.328
209	0.405	0.659	0.391	0.672	0.453	0.550	0.815	0.660	0.896	0.949	1.230	0.772	0.849	1.506	0.844	1.144	1.471
2092	0.491	0.800	0.474	0.847	0.549	0.875	0.989	0.800	1.087	1.150	1.491	1.080	1.441	2.557	1.023	1.388	2.428
2093	0.209	0.340	0.202	0.360	0.234	0.373	0.421	0.341	0.463	0.490	0.635	0.460	0.662	2.340	0.436	0.591	1.034
2094	0.328	0.533	0.316	0.564	0.366	0.583	0.659	0.533	0.725	0.767	0.994	0.720	1.036	2.131	0.682	0.925	1.619
2095	0.088	0.143	0.084	0.151	0.098	0.141	0.176	0.143	0.194	0.205	0.266	0.193	0.217	0.386	0.182	0.247	0.377
2096	0.166	0.270	0.160	0.286	0.185	0.295	0.333	0.270	0.367	0.388	0.503	0.364	0.524	1.572	0.345	0.468	0.819
2097	0.583	0.948	0.562	1.004	0.651	1.038	1.172	0.949	1.289	1.364	1.769	1.281	1.843	6.460	1.213	1.645	2.879
2099	0.455	0.740	0.438	0.532	0.508	0.436	0.915	0.740	1.006	1.064	1.140	0.611	0.672	1.192	0.947	0.957	1.165
22	0.447	0.471	0.284	0.200	0.396	0.293	0.303	0.200	0.268	0.339	0.268	0.268	0.268	0.444	0.444	0.444	0.447
2211	0.350	0.297	0.179	0.126	0.259	0.185	0.192	0.126	0.184	0.214	0.184	0.184	0.184	0.281	0.281	0.281	0.350
2221	0.319	0.261	0.157	0.111	0.227	0.162	0.168	0.111	0.162	0.188	0.162	0.162	0.162	0.246	0.246	0.246	0.319

TABLE 1A

WATER USE PER EMPLOYEE (MILLION GALLONS PER YEAR) FOR EACH WATER USE REGION AND SIC CODE

SIC	REGION NUMBER *1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
2231	0.592	0.646	0.396	0.357	0.524	0.428	0.542	0.357	0.354	0.606	0.354	0.354	0.354	0.653	0.653	0.653	0.592
2241	0.145	0.159	0.097	0.104	0.129	0.105	0.157	0.104	0.087	0.176	0.087	0.087	0.087	0.161	0.161	0.161	0.145
225	0.143	0.156	0.095	0.108	0.126	0.103	0.163	0.108	0.085	0.183	0.085	0.085	0.085	0.158	0.158	0.158	0.143
2251	0.059	0.064	0.039	0.061	0.052	0.043	0.077	0.061	0.035	0.103	0.035	0.035	0.035	0.065	0.065	0.065	0.059
2252	0.076	0.083	0.051	0.058	0.067	0.055	0.088	0.058	0.046	0.098	0.046	0.046	0.046	0.084	0.084	0.084	0.076
2253	0.117	0.128	0.079	0.092	0.104	0.085	0.139	0.092	0.070	0.156	0.070	0.070	0.070	0.130	0.130	0.130	0.117
2254	0.101	0.110	0.068	0.071	0.090	0.073	0.108	0.071	0.061	0.121	0.061	0.061	0.061	0.112	0.112	0.112	0.101
2256	0.360	0.392	0.240	0.251	0.318	0.260	0.381	0.251	0.215	0.426	0.215	0.215	0.215	0.397	0.397	0.397	0.360
226	0.846	0.923	0.566	0.607	0.749	0.612	0.920	0.607	0.507	1.029	0.507	0.507	0.507	0.934	0.934	0.934	0.846
2261	0.796	0.869	0.532	0.572	0.705	0.576	0.867	0.572	0.477	0.970	0.477	0.477	0.477	0.879	0.879	0.879	0.796
2262	1.086	1.186	0.727	0.767	0.962	0.786	1.164	0.767	0.651	1.301	0.651	0.651	0.651	1.199	1.199	1.199	1.086
2269	0.581	0.635	0.389	0.430	0.515	0.421	0.653	0.430	0.348	0.730	0.348	0.348	0.348	0.642	0.642	0.642	0.581
227	0.498	0.544	0.333	0.234	0.441	0.344	0.356	0.234	0.298	0.398	0.298	0.298	0.298	0.521	0.521	0.521	0.498
2272	0.391	0.427	0.262	0.253	0.346	0.283	0.384	0.253	0.234	0.429	0.234	0.234	0.234	0.432	0.432	0.432	0.391
228	0.489	0.400	0.241	0.170	0.349	0.249	0.258	0.170	0.248	0.288	0.248	0.248	0.248	0.378	0.378	0.378	0.489
2281	0.285	0.233	0.140	0.099	0.203	0.145	0.150	0.099	0.144	0.168	0.144	0.144	0.144	0.220	0.220	0.220	0.285
2282	0.124	0.135	0.083	0.113	0.110	0.090	0.162	0.113	0.074	0.192	0.074	0.074	0.074	0.137	0.137	0.137	0.124

TABLE 1A

WATER USE PER EMPLOYEE (MILLION GALLONS PER YEAR) FOR EACH WATER USE REGION AND SIC CODE

SIC	REGION NUMBER *1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
2283	0.220	0.241	0.147	0.231	0.195	0.160	0.288	0.231	0.132	0.391	0.132	0.132	0.132	0.243	0.243	0.243	0.220
2284	0.379	0.414	0.253	0.375	0.335	0.274	0.495	0.375	0.227	0.636	0.227	0.227	0.227	0.418	0.418	0.418	0.379
229	0.349	0.358	0.216	0.152	0.309	0.223	0.231	0.152	0.209	0.258	0.209	0.209	0.209	0.338	0.338	0.338	0.349
2291	0.344	0.376	0.230	0.187	0.305	0.249	0.284	0.187	0.206	0.317	0.206	0.206	0.206	0.380	0.380	0.380	0.344
2295	0.471	0.514	0.315	0.243	0.417	0.341	0.369	0.243	0.282	0.413	0.282	0.282	0.282	0.520	0.520	0.520	0.471
2297	0.320	0.349	0.214	0.248	0.283	0.232	0.376	0.248	0.192	0.420	0.192	0.192	0.192	0.353	0.353	0.353	0.320
2298	0.145	0.159	0.097	0.111	0.129	0.105	0.168	0.111	0.087	0.188	0.087	0.087	0.087	0.160	0.160	0.160	0.145
2299	0.456	0.373	0.225	0.159	0.325	0.232	0.241	0.159	0.231	0.269	0.231	0.231	0.231	0.353	0.353	0.353	0.456
24	0.352	0.352	0.352	0.489	0.352	0.256	0.256	0.489	0.489	0.727	0.282	0.282	0.520	1.036	1.036	1.036	1.588
242	0.428	0.428	0.428	0.596	0.428	0.312	0.312	0.596	0.596	1.100	0.343	0.343	0.786	1.262	1.262	1.262	1.934
243	0.254	0.254	0.254	0.405	0.254	0.232	0.232	0.405	0.405	0.399	0.165	0.165	0.286	0.938	0.938	0.938	1.086
2432	0.320	0.320	0.320	0.511	0.320	0.297	0.297	0.511	0.511	0.504	0.208	0.208	0.360	1.200	1.200	1.200	1.371
26	6.955	3.445	6.405	5.093	2.571	7.560	13.258	4.796	5.223	10.755	8.458	6.312	10.429	8.458	8.458	6.831	16.234
2611	22.625	11.207	20.837	16.569	8.363	24.592	43.132	15.604	16.990	34.987	27.516	20.534	33.926	27.516	27.516	22.222	52.813
2621	7.186	3.560	6.618	5.263	2.656	7.811	13.700	4.956	5.397	11.113	8.740	6.522	10.776	8.740	8.740	7.058	16.775
2631	10.402	5.152	9.579	7.617	3.845	11.306	19.829	7.174	7.811	16.085	12.650	9.440	15.597	12.650	12.650	10.216	24.280
264	0.577	0.286	0.531	0.422	0.213	0.627	1.100	0.336	0.431	0.892	0.702	0.524	0.865	0.702	0.702	0.567	1.347

TABLE 1A

WATER USE PER EMPLOYEE (MILLION GALLONS PER YEAR) FOR EACH WATER USE REGION AND SIC CODE

SIC	REGION NUMBER *1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
2641	0.364	0.274	0.349	0.363	0.186	0.590	0.885	0.197	0.253	0.855	0.604	0.502	0.829	0.604	0.604	0.543	1.291
2643	0.287	0.288	0.276	0.287	0.147	0.466	0.699	0.156	0.200	0.698	0.477	0.748	1.279	0.477	0.477	0.479	1.280
2646	0.944	0.468	0.870	0.691	0.349	1.026	1.800	0.651	0.709	1.460	1.148	0.857	1.416	1.148	1.148	0.927	2.204
2647	0.704	0.349	0.648	0.515	0.260	0.765	1.342	0.485	0.529	1.088	0.856	0.639	1.055	0.856	0.856	0.691	1.643
2649	0.050	0.036	0.048	0.050	0.026	0.079	0.122	0.027	0.035	0.112	0.083	0.066	0.109	0.083	0.083	0.071	0.170
265	0.130	0.089	0.125	0.130	0.066	0.196	0.316	0.071	0.090	0.278	0.216	0.163	0.270	0.216	0.216	0.177	0.420
2651	0.531	0.263	0.489	0.389	0.196	0.577	1.012	0.290	0.372	0.821	0.646	0.482	0.796	0.646	0.646	0.521	1.239
2654	0.058	0.045	0.056	0.058	0.030	0.094	0.142	0.032	0.040	0.140	0.097	0.082	0.135	0.097	0.097	0.089	0.211
2661	2.533	1.255	2.333	1.855	0.936	2.754	4.829	1.747	1.902	3.917	3.081	2.299	3.799	3.081	3.081	2.488	5.913
28	0.634	0.692	1.087	1.629	0.819	1.653	3.515	2.859	2.389	6.169	1.068	4.425	16.595	3.500	3.500	2.577	3.406
281	1.108	1.210	1.900	2.848	1.432	2.890	6.145	5.542	4.177	10.785	1.867	8.579	29.010	6.785	6.785	4.996	5.954
2812	0.340	0.371	0.582	0.873	0.439	0.886	1.884	2.078	1.280	3.306	0.572	5.098	8.893	2.657	2.657	1.761	1.825
2813	1.003	1.096	1.720	2.578	1.296	2.616	5.563	6.136	3.781	9.763	1.690	15.055	26.262	7.847	7.847	5.201	5.390
2815	0.440	0.481	0.754	1.131	0.569	1.147	2.440	1.861	1.658	4.282	0.741	2.881	11.517	2.279	2.279	1.678	2.364
2816	0.651	0.711	1.116	1.672	0.841	1.697	3.608	3.549	2.457	6.333	1.096	5.494	17.034	4.345	4.345	3.199	3.496
2818	1.795	1.961	3.078	4.614	2.320	4.682	9.956	8.334	6.766	17.472	3.024	12.901	46.999	10.204	10.204	7.513	9.645
2819	0.714	0.780	1.225	1.835	0.923	1.863	3.799	2.662	2.692	6.951	1.203	4.122	18.697	3.260	3.260	2.400	3.837

TABLE 1A

WATER USE PER EMPLOYEE (MILLION GALLONS PER YEAR) FOR EACH WATER USE REGION AND SIC CODE

SIC	REGION NUMBER *1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
282	0.383	0.418	0.657	0.985	0.495	0.999	1.987	1.392	1.444	3.728	0.645	2.156	10.029	1.705	1.705	1.255	2.058
2821	0.452	0.494	0.775	1.162	0.584	1.179	1.934	1.355	1.704	4.400	0.762	2.098	11.837	1.660	1.660	1.222	2.429
2822	1.540	1.682	2.641	3.958	1.990	4.016	2.591	1.816	2.535	12.362	1.101	2.811	21.073	2.223	2.223	1.637	5.926
2823	0.448	0.490	0.769	1.152	0.579	1.169	2.487	2.001	1.690	4.364	0.755	3.097	11.738	2.450	2.450	1.804	2.409
2824	0.075	0.082	0.129	0.193	0.097	0.196	0.417	0.460	0.284	0.732	0.127	1.129	1.970	0.589	0.589	0.390	0.404
283	0.045	0.049	0.077	0.115	0.058	0.117	0.249	0.275	0.169	0.437	0.076	0.520	1.175	0.351	0.351	0.233	0.241
2831	0.038	0.042	0.066	0.099	0.050	0.100	0.106	0.075	0.104	0.374	0.045	0.116	0.866	0.091	0.091	0.067	0.206
2833	0.118	0.128	0.202	0.302	0.152	0.307	0.652	0.719	0.443	1.144	0.198	1.764	3.078	0.920	0.920	0.610	0.632
2834	0.048	0.052	0.082	0.123	0.062	0.125	0.222	0.156	0.181	0.466	0.081	0.241	1.254	0.191	0.191	0.140	0.257
284	0.035	0.038	0.060	0.089	0.045	0.091	0.193	0.212	0.131	0.338	0.058	0.521	0.909	0.272	0.272	0.180	0.187
2841	0.041	0.044	0.070	0.104	0.053	0.106	0.225	0.249	0.153	0.396	0.068	0.610	1.064	0.318	0.318	0.211	0.218
2842	0.049	0.054	0.084	0.126	0.064	0.128	0.117	0.082	0.114	0.479	0.050	0.127	0.951	0.100	0.100	0.074	0.264
2843	0.074	0.081	0.127	0.190	0.096	0.193	0.410	0.452	0.279	0.720	0.125	1.110	1.936	0.578	0.578	0.383	0.397
2844	0.012	0.013	0.020	0.030	0.015	0.030	0.041	0.029	0.040	0.114	0.017	0.044	0.306	0.035	0.035	0.026	0.063
2851	0.084	0.092	0.144	0.216	0.109	0.220	0.334	0.234	0.317	0.820	0.142	0.363	2.205	0.287	0.287	0.211	0.453
2861	0.250	0.273	0.429	0.643	0.323	0.652	1.387	1.529	0.942	2.433	0.421	2.900	6.546	1.956	1.956	1.296	1.343
287	1.699	1.856	2.913	4.365	2.195	4.430	3.987	2.795	3.902	16.531	1.694	4.326	32.430	3.422	3.422	2.519	9.120

TABLE 1A

WATER USE PER EMPLOYEE (MILLION GALLONS PER YEAR) FOR EACH WATER USE REGION AND SIC CODE

SIC	REGION NUMBER *1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
2871	2.275	2.485	3.901	5.847	2.941	5.934	5.221	3.659	5.109	22.143	2.218	5.665	42.465	4.481	4.481	3.299	11.942
289	0.389	0.425	0.667	1.000	0.503	1.014	2.157	1.690	1.466	3.786	0.655	2.617	10.184	2.070	2.070	1.524	2.090
2891	0.784	0.857	1.344	2.015	1.013	2.045	1.691	1.185	1.655	7.631	0.718	1.835	13.752	1.451	1.451	1.068	3.867
2892	0.289	0.316	0.496	0.743	0.374	0.754	1.604	1.769	1.090	2.815	0.487	3.109	7.572	2.263	2.263	1.500	1.554
2899	0.271	0.296	0.464	0.695	0.350	0.706	1.501	1.063	1.020	2.634	0.456	1.646	7.084	1.302	1.302	0.958	1.454
29	5.196	5.196	5.196	1.047	2.331	2.331	3.270	3.477	0.837	4.169	4.527	1.388	6.188	2.272	2.272	2.272	2.182
2911	5.393	5.393	5.393	1.087	2.419	2.419	3.393	3.609	0.869	4.327	4.698	1.471	6.422	2.358	2.358	2.358	2.313
295	0.796	0.796	0.796	0.160	0.357	0.357	0.501	0.532	0.128	0.638	0.467	0.141	0.948	0.348	0.348	0.348	0.222
2951	1.022	1.022	1.022	0.206	0.268	0.268	0.643	0.684	0.163	0.820	0.268	0.081	0.630	0.446	0.446	0.446	0.127
2952	0.771	0.771	0.771	0.155	0.346	0.346	0.485	0.516	0.124	0.619	0.486	0.147	0.919	0.337	0.337	0.337	0.231
299	0.244	0.244	0.244	0.049	0.109	0.109	0.153	0.163	0.039	0.196	0.182	0.055	0.290	0.107	0.107	0.107	0.087
2999	0.862	0.862	0.862	0.174	0.201	0.201	0.542	0.577	0.123	0.692	0.201	0.061	0.472	0.334	0.334	0.334	0.095
30	0.132	0.182	0.268	0.221	0.283	0.283	0.062	0.389	0.291	0.040	0.108	0.108	0.062	0.108	0.108	0.111	0.132
3011	0.147	0.202	0.297	0.245	0.314	0.314	0.068	0.431	0.323	0.044	0.120	0.120	0.068	0.120	0.120	0.123	0.147
3021	0.020	0.027	0.040	0.033	0.042	0.042	0.009	0.058	0.044	0.006	0.016	0.016	0.009	0.016	0.016	0.017	0.020
3069	0.096	0.131	0.194	0.160	0.205	0.205	0.045	0.281	0.211	0.029	0.078	0.078	0.045	0.078	0.078	0.080	0.096
3079	0.172	0.237	0.343	0.288	0.280	0.280	0.080	0.507	0.380	0.052	0.141	0.141	0.080	0.141	0.141	0.145	0.172

TABLE 1A

WATER USE PER EMPLOYEE (MILLION GALLONS PER YEAR) FOR EACH WATER USE REGION AND SIC CODE

SIC	REGION NUMBER *1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
31	0.434	0.423	0.303	0.606	1.226	1.226	1.226	0.606	1.226	1.226	1.226	1.226	1.226	1.333	1.333	1.333	1.226
3111	0.754	0.753	0.527	1.053	2.133	2.133	2.133	1.053	2.133	2.133	2.133	2.133	2.133	2.317	2.317	2.317	2.133
314	0.012	0.009	0.008	0.014	0.025	0.025	0.025	0.014	0.025	0.025	0.025	0.025	0.025	0.035	0.035	0.035	0.025
3141	0.012	0.009	0.008	0.014	0.025	0.025	0.025	0.014	0.025	0.025	0.025	0.025	0.025	0.035	0.035	0.035	0.025
32	0.174	0.740	0.461	0.384	0.371	0.424	0.820	0.615	0.388	0.741	0.526	0.345	0.509	0.167	1.333	1.038	1.684
3211	0.214	0.912	0.568	0.473	0.458	0.523	1.532	0.759	0.479	0.914	0.648	0.645	0.951	0.311	1.645	1.652	2.077
322	0.049	0.178	0.156	0.140	0.071	0.116	0.151	0.225	0.142	0.184	0.106	0.064	0.094	0.031	0.245	0.191	0.337
3221	0.020	0.087	0.054	0.045	0.043	0.050	0.130	0.072	0.045	0.087	0.062	0.055	0.081	0.026	0.156	0.157	0.197
3229	0.057	0.207	0.181	0.244	0.083	0.135	0.176	0.385	0.328	0.214	0.124	0.074	0.109	0.036	0.286	0.222	0.393
3231	0.088	0.376	0.234	0.195	0.189	0.216	0.418	0.313	0.198	0.377	0.267	0.176	0.259	0.085	0.678	0.528	0.857
3241	0.291	1.237	0.771	0.641	0.620	0.709	2.960	1.029	0.649	1.239	0.879	1.154	1.528	0.464	2.229	2.239	2.816
325	0.018	0.078	0.049	0.041	0.039	0.045	0.146	0.065	0.041	0.078	0.056	0.061	0.090	0.029	0.141	0.142	0.178
3255	0.015	0.064	0.040	0.033	0.032	0.037	0.152	0.053	0.033	0.064	0.045	0.059	0.079	0.024	0.115	0.115	0.145
326	0.023	0.100	0.062	0.052	0.048	0.057	0.103	0.083	0.052	0.100	0.071	0.043	0.064	0.021	0.167	0.130	0.227
3261	0.027	0.113	0.070	0.059	0.057	0.065	0.235	0.094	0.059	0.113	0.080	0.099	0.140	0.042	0.204	0.205	0.257
3264	0.014	0.050	0.043	0.059	0.020	0.032	0.042	0.093	0.064	0.051	0.030	0.018	0.026	0.009	0.069	0.053	0.094
327	0.304	1.106	0.928	0.772	0.441	0.719	0.940	1.239	0.782	1.146	0.662	0.396	0.584	0.191	1.527	1.189	2.100

TABLE 1A

WATER USE PER EMPLOYEE (MILLION GALLONS PER YEAR) FOR EACH WATER USE REGION AND SIC CODE

	REGION NUMBER																
SIC	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
3273	0.819	2.991	2.610	2.228	1.189	1.939	2.533	3.574	2.256	3.088	1.784	1.067	1.573	0.515	4.117	3.204	5.661
3274	0.234	0.904	0.613	0.515	0.448	0.569	0.953	0.827	0.522	0.995	0.671	0.401	0.592	0.194	1.549	1.206	2.131
3275	0.130	0.472	0.341	0.325	0.188	0.307	0.401	0.522	0.329	0.489	0.283	0.169	0.249	0.082	0.652	0.508	0.897
3281	0.266	0.969	0.765	0.636	0.387	0.631	0.824	1.021	0.644	1.004	0.580	0.347	0.512	0.167	1.339	1.042	1.841
329	0.227	0.826	0.723	0.634	0.330	0.537	0.702	1.017	0.642	0.856	0.494	0.296	0.436	0.143	1.141	0.888	1.569
3291	0.041	0.174	0.109	0.090	0.087	0.100	0.271	0.145	0.092	0.175	0.124	0.114	0.168	0.055	0.314	0.316	0.397
3292	0.133	0.475	0.415	0.467	0.189	0.309	0.403	0.749	0.473	0.492	0.284	0.170	0.250	0.082	0.655	0.510	0.901
3293	0.051	0.216	0.135	0.112	0.108	0.124	0.230	0.180	0.114	0.217	0.154	0.097	0.143	0.047	0.374	0.291	0.492
3295	4.495	16.355	12.639	10.518	6.525	10.639	13.898	16.872	10.650	16.944	9.790	5.853	8.632	2.824	22.592	17.580	31.064
3296	0.117	0.424	0.372	0.352	0.169	0.276	0.361	0.565	0.357	0.440	0.254	0.152	0.224	0.073	0.586	0.456	0.806
3297	0.410	1.490	1.305	1.521	0.595	0.969	1.266	2.439	1.540	1.544	0.892	0.533	0.787	0.257	2.059	1.602	2.831
3299	0.091	0.331	0.290	0.390	0.132	0.215	0.281	0.617	0.811	0.343	0.198	0.119	0.175	0.057	0.457	0.356	0.629
33	0.825	0.720	1.090	2.643	1.681	1.202	1.654	3.225	1.349	1.654	2.081	1.876	4.337	1.771	2.568	0.378	3.423
331	1.103	0.962	1.456	3.533	2.248	1.706	2.211	4.311	1.804	2.211	2.782	2.508	5.797	2.514	3.645	0.536	4.575
3312	1.203	1.050	1.589	3.856	2.453	1.708	2.412	4.704	1.969	2.412	3.036	2.737	6.326	2.516	3.648	0.537	4.993
3313	0.063	0.055	0.083	0.202	0.129	0.155	0.127	0.247	0.103	0.127	0.159	0.144	0.332	0.653	0.724	0.220	0.262
3315	0.095	0.160	0.243	0.589	0.374	0.120	0.212	0.718	0.301	0.212	0.251	0.262	0.845	0.176	0.255	0.038	0.356

TABLE 1A

WATER USE PER EMPLOYEE (MILLION GALLONS PER YEAR) FOR EACH WATER USE REGION AND SIC CODE

	REGION NUMBER																
SIC	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
3316	0.132	0.120	0.182	0.441	0.280	0.165	0.276	0.538	0.225	0.276	0.347	0.313	0.723	0.244	0.353	0.052	0.493
3317	0.124	0.274	0.415	0.835	0.640	0.156	0.276	0.962	0.450	0.276	0.326	0.341	1.100	0.229	0.333	0.049	0.464
332	0.068	0.065	0.099	0.240	0.152	0.085	0.150	0.292	0.122	0.150	0.179	0.170	0.393	0.126	0.182	0.027	0.254
3321	0.084	0.088	0.133	0.323	0.205	0.105	0.185	0.394	0.165	0.185	0.219	0.229	0.530	0.154	0.224	0.033	0.312
3322	0.041	0.036	0.054	0.132	0.084	0.093	0.082	0.161	0.067	0.082	0.104	0.094	0.216	0.136	0.158	0.029	0.171
3323	0.031	0.027	0.041	0.100	0.063	0.043	0.062	0.122	0.051	0.062	0.079	0.071	0.164	0.064	0.093	0.014	0.129
333	1.543	1.346	2.037	4.942	3.144	2.008	3.092	6.029	2.523	3.092	3.891	3.508	8.108	2.958	4.289	0.631	5.983
3331	0.710	2.672	4.202	4.773	3.954	0.890	1.576	5.499	2.571	1.576	1.864	1.949	6.288	1.311	1.900	0.280	2.651
3332	0.680	2.184	3.306	4.573	3.788	0.852	1.510	5.268	2.463	1.510	1.786	1.867	6.023	1.256	1.821	0.268	2.540
3333	0.362	0.316	0.478	1.160	0.738	0.889	0.726	1.415	0.592	0.726	0.913	0.823	1.903	2.038	2.955	0.435	1.502
3334	0.981	0.856	1.295	3.143	1.999	1.940	1.966	3.834	1.605	1.966	2.475	2.231	5.157	2.857	4.143	0.610	4.070
3339	2.841	2.479	3.752	9.102	5.790	6.179	5.695	11.105	4.647	5.695	7.167	6.462	14.934	9.101	13.196	1.942	11.787
3341	0.076	0.197	0.298	0.512	0.424	0.095	0.169	0.590	0.276	0.169	0.200	0.209	0.674	0.141	0.204	0.030	0.284
335	0.133	0.289	0.438	0.894	0.676	0.167	0.295	1.030	0.482	0.295	0.349	0.365	1.178	0.246	0.356	0.052	0.497
3351	0.218	0.359	0.544	1.319	0.839	0.273	0.483	1.609	0.673	0.483	0.572	0.598	1.928	0.402	0.583	0.086	0.813
3352	0.128	0.353	0.534	0.859	0.712	0.160	0.284	0.990	0.463	0.284	0.336	0.351	1.132	0.236	0.342	0.050	0.477
3356	0.108	0.094	0.142	0.345	0.220	0.148	0.216	0.421	0.176	0.216	0.272	0.245	0.567	0.218	0.316	0.046	0.441

TABLE 1A

WATER USE PER EMPLOYEE (MILLION GALLONS PER YEAR) FOR EACH WATER USE REGION AND SIC CODE

SIC	REGION NUMBER *1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
3357	0.073	0.171	0.260	0.488	0.401	0.091	0.161	0.562	0.263	0.161	0.191	0.199	0.643	0.134	0.194	0.029	0.271
336	0.079	0.201	0.304	0.529	0.438	0.099	0.175	0.609	0.285	0.175	0.206	0.216	0.696	0.145	0.210	0.031	0.294
3361	0.110	0.257	0.389	0.742	0.600	0.138	0.245	0.855	0.400	0.245	0.290	0.303	0.978	0.204	0.296	0.044	0.412
3362	0.049	0.047	0.071	0.173	0.110	0.061	0.107	0.211	0.088	0.107	0.127	0.123	0.284	0.089	0.129	0.019	0.181
3369	0.035	0.132	0.224	0.236	0.196	0.044	0.078	0.272	0.127	0.078	0.092	0.096	0.311	0.065	0.094	0.014	0.131
339	0.062	0.079	0.119	0.289	0.184	0.078	0.138	0.353	0.148	0.138	0.163	0.171	0.475	0.115	0.166	0.024	0.232
3391	0.039	0.034	0.051	0.124	0.079	0.060	0.078	0.152	0.063	0.078	0.098	0.088	0.204	0.088	0.128	0.019	0.161
3392	0.047	0.136	0.205	0.315	0.261	0.059	0.104	0.363	0.170	0.104	0.123	0.129	0.415	0.086	0.125	0.018	0.175
3399	0.183	0.233	0.353	0.857	0.545	0.229	0.406	1.045	0.437	0.406	0.480	0.502	1.406	0.337	0.489	0.072	0.682
34	0.189	0.082	0.144	0.139	0.206	0.103	0.242	0.136	0.217	0.264	0.096	0.096	0.081	0.096	0.096	0.113	0.189
3411	0.012	0.005	0.009	0.023	0.019	0.007	0.015	0.022	0.017	0.017	0.006	0.006	0.005	0.006	0.006	0.007	0.012
342	0.170	0.074	0.130	0.193	0.274	0.103	0.218	0.189	0.248	0.238	0.087	0.087	0.073	0.087	0.087	0.102	0.170
3421	0.096	0.042	0.073	0.186	0.155	0.058	0.123	0.180	0.141	0.134	0.049	0.049	0.041	0.049	0.049	0.058	0.096
3423	0.084	0.037	0.064	0.113	0.136	0.051	0.108	0.110	0.123	0.118	0.043	0.043	0.036	0.043	0.043	0.050	0.084
3425	0.064	0.028	0.049	0.124	0.103	0.039	0.082	0.120	0.094	0.090	0.033	0.033	0.028	0.033	0.033	0.038	0.064
3429	0.230	0.100	0.175	0.144	0.214	0.106	0.290	0.141	0.225	0.321	0.117	0.117	0.058	0.117	0.117	0.134	0.230
343	0.184	0.080	0.140	0.166	0.247	0.111	0.236	0.163	0.259	0.257	0.093	0.093	0.079	0.093	0.093	0.110	0.184

TABLE 1A

WATER USE PER EMPLOYEE (MILLION GALLONS PER YEAR) FOR EACH WATER USE REGION AND SIC CODE

SIC	REGION NUMBER *1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
3431	0.309	0.134	0.235	0.233	0.345	0.172	0.396	0.228	0.363	0.431	0.157	0.157	0.132	0.157	0.157	0.184	0.309
3432	0.126	0.055	0.096	0.113	0.168	0.076	0.161	0.111	0.176	0.176	0.064	0.064	0.054	0.064	0.064	0.075	0.126
3433	0.107	0.046	0.082	0.142	0.172	0.065	0.137	0.139	0.156	0.150	0.054	0.054	0.046	0.054	0.054	0.064	0.107
344	0.050	0.022	0.038	0.096	0.081	0.030	0.064	0.094	0.073	0.070	0.026	0.026	0.021	0.026	0.026	0.030	0.050
3441	0.011	0.005	0.008	0.021	0.017	0.006	0.014	0.020	0.016	0.015	0.005	0.005	0.005	0.005	0.005	0.006	0.011
3442	0.231	0.100	0.176	0.148	0.220	0.109	0.296	0.145	0.231	0.322	0.117	0.117	0.099	0.117	0.117	0.138	0.231
3443	0.035	0.015	0.027	0.068	0.056	0.021	0.045	0.065	0.051	0.049	0.018	0.018	0.015	0.018	0.018	0.021	0.035
3444	0.072	0.031	0.054	0.111	0.115	0.043	0.092	0.109	0.104	0.100	0.036	0.036	0.031	0.036	0.036	0.043	0.072
345	0.126	0.054	0.095	0.128	0.190	0.076	0.161	0.125	0.183	0.175	0.064	0.064	0.054	0.064	0.064	0.075	0.126
3461	0.283	0.083	0.159	0.099	0.147	0.073	0.199	0.097	0.154	0.264	0.095	0.095	0.068	0.095	0.095	0.092	0.283
347	0.763	0.330	0.581	0.774	1.149	0.460	0.978	0.759	1.113	1.065	0.388	0.388	0.326	0.388	0.388	0.456	0.763
3471	0.810	0.350	0.616	0.808	1.199	0.488	1.037	0.792	1.181	1.130	0.411	0.411	0.346	0.411	0.411	0.484	0.810
3479	0.405	0.175	0.308	0.510	0.651	0.244	0.519	0.499	0.591	0.565	0.206	0.206	0.173	0.206	0.206	0.242	0.405
3481	0.114	0.049	0.086	0.151	0.193	0.069	0.146	0.148	0.166	0.159	0.058	0.058	0.049	0.058	0.058	0.068	0.114
349	0.098	0.043	0.075	0.125	0.158	0.059	0.126	0.122	0.143	0.137	0.050	0.050	0.042	0.050	0.050	0.059	0.098
3491	0.117	0.050	0.089	0.225	0.188	0.070	0.149	0.217	0.170	0.163	0.059	0.059	0.050	0.059	0.059	0.070	0.117
3493	0.067	0.029	0.051	0.130	0.108	0.041	0.086	0.125	0.098	0.094	0.034	0.034	0.029	0.034	0.034	0.040	0.067

TABLE 1A

WATER USE PER EMPLOYEE (MILLION GALLONS PER YEAR) FOR EACH WATER USE REGION AND SIC CODE

	REGION NUMBER															
SIC	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
3494	0.055	0.024	0.042	0.100	0.088	0.033	0.070	0.098	0.080	0.076	0.028	0.028	0.023	0.028	0.028	0.033	0.055
3497	0.242	0.105	0.184	0.278	0.390	0.146	0.311	0.272	0.354	0.338	0.123	0.123	0.104	0.123	0.123	0.145	0.242
3498	0.056	0.024	0.043	0.108	0.090	0.034	0.072	0.105	0.082	0.078	0.028	0.028	0.024	0.028	0.028	0.034	0.056
3499	0.127	0.055	0.097	0.118	0.175	0.077	0.163	0.115	0.183	0.178	0.065	0.065	0.054	0.065	0.065	0.076	0.127
35	0.030	0.028	0.076	0.082	0.124	0.108	0.113	0.081	0.096	0.158	0.026	0.086	0.167	0.026	0.026	0.055	0.030
351	0.028	0.026	0.109	0.077	0.117	0.102	0.433	0.077	0.091	0.320	0.025	0.108	0.639	0.025	0.025	0.087	0.028
3511	0.004	0.004	0.015	0.011	0.016	0.014	0.097	0.011	0.013	0.045	0.003	0.015	0.153	0.003	0.003	0.012	0.004
3519	0.074	0.068	0.060	0.085	0.125	0.208	0.089	0.147	0.219	0.124	0.030	0.068	0.131	0.030	0.030	0.044	0.074
3522	0.043	0.040	0.133	0.117	0.177	0.154	0.198	0.116	0.137	0.277	0.038	0.150	0.292	0.038	0.038	0.097	0.043
353	0.072	0.066	0.050	0.070	0.104	0.173	0.074	0.122	0.182	0.104	0.025	0.056	0.109	0.025	0.025	0.036	0.072
3531	0.048	0.044	0.057	0.081	0.120	0.172	0.085	0.130	0.153	0.119	0.029	0.064	0.125	0.029	0.029	0.042	0.048
3532	0.010	0.009	0.025	0.027	0.042	0.036	0.037	0.027	0.032	0.051	0.009	0.028	0.054	0.009	0.009	0.018	0.010
3533	0.209	0.353	0.042	0.059	0.088	0.146	0.063	0.103	0.154	0.088	0.021	0.048	0.092	0.021	0.021	0.031	0.209
3536	0.141	0.130	0.102	0.145	0.215	0.356	0.153	0.252	0.375	0.213	0.052	0.116	0.225	0.052	0.052	0.075	0.141
3537	0.015	0.014	0.011	0.015	0.022	0.037	0.016	0.026	0.039	0.022	0.005	0.012	0.023	0.005	0.005	0.008	0.015
354	0.017	0.015	0.023	0.032	0.048	0.080	0.034	0.045	0.053	0.047	0.012	0.026	0.050	0.012	0.012	0.017	0.017
3541	0.011	0.010	0.023	0.030	0.045	0.040	0.034	0.030	0.035	0.048	0.010	0.026	0.051	0.010	0.010	0.017	0.011

TABLE 1A

WATER USE PER EMPLOYEE (MILLION GALLONS PER YEAR) FOR EACH WATER USE REGION AND SIC CODE

	REGION NUMBER																
SIC	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
3544	0.027	0.025	0.060	0.074	0.112	0.097	0.089	0.073	0.086	0.125	0.024	0.068	0.132	0.024	0.024	0.044	0.027
3545	0.019	0.017	0.019	0.027	0.040	0.066	0.028	0.046	0.060	0.039	0.010	0.021	0.041	0.010	0.010	0.014	0.019
3548	0.025	0.023	0.022	0.031	0.046	0.077	0.033	0.054	0.081	0.046	0.011	0.025	0.049	0.011	0.011	0.016	0.025
355	0.023	0.021	0.031	0.044	0.066	0.083	0.047	0.063	0.074	0.065	0.016	0.035	0.069	0.016	0.016	0.023	0.023
3552	0.038	0.035	0.065	0.092	0.136	0.137	0.097	0.104	0.122	0.135	0.033	0.073	0.143	0.033	0.033	0.047	0.038
3553	0.025	0.023	0.040	0.057	0.085	0.089	0.060	0.067	0.079	0.084	0.020	0.046	0.089	0.020	0.020	0.029	0.025
3559	0.012	0.011	0.019	0.027	0.040	0.042	0.029	0.032	0.037	0.040	0.010	0.022	0.042	0.010	0.010	0.014	0.012
356	0.029	0.027	0.030	0.043	0.064	0.104	0.045	0.075	0.092	0.063	0.015	0.034	0.067	0.015	0.015	0.022	0.029
3561	0.016	0.015	0.022	0.031	0.046	0.059	0.033	0.044	0.052	0.046	0.011	0.025	0.049	0.011	0.011	0.016	0.016
3562	0.032	0.029	0.032	0.045	0.067	0.111	0.047	0.078	0.101	0.066	0.016	0.036	0.070	0.016	0.016	0.023	0.032
3566	0.021	0.020	0.037	0.052	0.077	0.078	0.054	0.059	0.069	0.076	0.019	0.041	0.080	0.019	0.019	0.027	0.021
3569	0.169	0.156	0.098	0.139	0.206	0.342	0.146	0.241	0.360	0.204	0.050	0.111	0.216	0.050	0.050	0.072	0.169
357	0.018	0.017	0.037	0.050	0.075	0.066	0.054	0.049	0.058	0.076	0.016	0.041	0.080	0.016	0.016	0.027	0.018
3572	0.027	0.025	0.027	0.038	0.056	0.093	0.040	0.066	0.087	0.055	0.014	0.030	0.059	0.014	0.014	0.019	0.027
3573	0.012	0.011	0.047	0.033	0.050	0.044	0.071	0.033	0.039	0.099	0.011	0.046	0.104	0.011	0.011	0.035	0.012
3574	0.005	0.005	0.014	0.015	0.023	0.020	0.021	0.015	0.017	0.029	0.005	0.016	0.031	0.005	0.005	0.010	0.005
358	0.041	0.038	0.030	0.042	0.063	0.105	0.045	0.074	0.110	0.063	0.015	0.034	0.066	0.015	0.015	0.022	0.041

TABLE 1A

WATER USE PER EMPLOYEE (MILLION GALLONS PER YEAR) FOR EACH WATER USE REGION AND SIC CODE

SIC	REGION NUMBER *1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
3581	0.041	0.038	0.017	0.024	0.036	0.060	0.026	0.042	0.063	0.036	0.009	0.019	0.038	0.009	0.009	0.012	0.041
3585	0.046	0.043	0.033	0.046	0.069	0.114	0.049	0.081	0.120	0.068	0.017	0.037	0.072	0.017	0.017	0.024	0.046
3586	0.009	0.009	0.020	0.025	0.038	0.033	0.030	0.025	0.030	0.042	0.008	0.023	0.044	0.008	0.008	0.015	0.009
3599	0.062	0.057	0.039	0.055	0.081	0.135	0.058	0.095	0.142	0.081	0.020	0.044	0.085	0.020	0.020	0.028	0.062
36	0.101	0.069	0.096	0.119	0.158	0.083	0.117	0.085	0.062	0.040	0.064	0.111	0.117	0.064	0.064	0.040	0.101
361	0.054	0.037	0.051	0.078	0.085	0.076	0.114	0.075	0.033	0.021	0.062	0.072	0.114	0.062	0.062	0.040	0.054
3611	0.062	0.042	0.059	0.066	0.089	0.047	0.066	0.048	0.038	0.024	0.036	0.062	0.066	0.036	0.036	0.023	0.062
3612	0.029	0.019	0.027	0.041	0.044	0.040	0.070	0.039	0.017	0.011	0.080	0.038	0.070	0.080	0.080	0.030	0.028
3613	0.063	0.043	0.060	0.091	0.098	0.088	0.128	0.087	0.038	0.025	0.070	0.084	0.128	0.070	0.070	0.044	0.063
362	0.069	0.047	0.065	0.100	0.109	0.097	0.172	0.096	0.042	0.027	0.096	0.092	0.172	0.096	0.096	0.061	0.069
3621	0.052	0.035	0.049	0.075	0.081	0.073	0.129	0.072	0.032	0.020	0.105	0.069	0.129	0.105	0.105	0.055	0.052
3622	0.039	0.027	0.037	0.057	0.061	0.055	0.091	0.054	0.024	0.015	0.049	0.052	0.091	0.049	0.049	0.031	0.039
3623	0.090	0.086	0.121	0.070	0.093	0.049	0.069	0.050	0.056	0.047	0.038	0.066	0.069	0.038	0.038	0.024	0.090
3624	0.264	0.180	0.251	0.335	0.415	0.235	0.330	0.241	0.161	0.104	0.180	0.313	0.330	0.180	0.180	0.114	0.264
3629	0.074	0.051	0.070	0.107	0.116	0.104	0.185	0.103	0.045	0.029	0.146	0.099	0.185	0.146	0.146	0.079	0.074
363	0.031	0.021	0.029	0.045	0.049	0.044	0.077	0.043	0.019	0.012	0.118	0.041	0.077	0.118	0.118	0.033	0.031
3631	0.062	0.042	0.059	0.085	0.097	0.060	0.084	0.061	0.038	0.024	0.046	0.080	0.084	0.046	0.046	0.029	0.062

TABLE 1A

WATER USE PER EMPLOYEE (MILLION GALLONS PER YEAR) FOR EACH WATER USE REGION AND SIC CODE

SIC	REGION NUMBER *1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
3632	0.251	0.172	0.239	0.305	0.395	0.214	0.301	0.219	0.153	0.099	0.164	0.285	0.301	0.164	0.164	0.104	0.251
3633	0.111	0.076	0.105	0.161	0.174	0.117	0.165	0.120	0.068	0.044	0.090	0.148	0.165	0.090	0.090	0.057	0.111
3634	0.138	0.094	0.131	0.192	0.217	0.135	0.190	0.138	0.084	0.055	0.103	0.180	0.190	0.103	0.103	0.065	0.138
3639	0.076	0.052	0.072	0.110	0.119	0.098	0.138	0.101	0.046	0.030	0.075	0.101	0.138	0.075	0.075	0.048	0.076
364	0.082	0.056	0.078	0.120	0.129	0.085	0.120	0.087	0.050	0.032	0.065	0.110	0.120	0.065	0.065	0.041	0.082
3641	0.017	0.011	0.016	0.024	0.026	0.024	0.042	0.023	0.010	0.007	0.043	0.022	0.042	0.043	0.043	0.018	0.017
3642	0.165	0.113	0.157	0.151	0.201	0.106	0.149	0.109	0.101	0.065	0.081	0.141	0.149	0.081	0.081	0.051	0.165
3643	0.051	0.035	0.048	0.074	0.080	0.071	0.103	0.070	0.031	0.020	0.056	0.068	0.103	0.056	0.056	0.036	0.051
3644	0.104	0.071	0.099	0.152	0.164	0.139	0.196	0.143	0.064	0.041	0.107	0.140	0.196	0.107	0.107	0.068	0.104
365	0.038	0.026	0.036	0.047	0.059	0.033	0.047	0.034	0.023	0.015	0.026	0.044	0.047	0.026	0.026	0.016	0.038
3651	0.026	0.017	0.024	0.034	0.040	0.024	0.033	0.024	0.016	0.010	0.018	0.032	0.033	0.018	0.018	0.012	0.026
3652	0.136	0.093	0.129	0.156	0.207	0.109	0.153	0.112	0.083	0.054	0.084	0.146	0.153	0.084	0.084	0.053	0.136
366	0.059	0.040	0.056	0.065	0.087	0.046	0.064	0.047	0.036	0.023	0.035	0.061	0.064	0.035	0.035	0.022	0.059
367	0.138	0.096	0.134	0.108	0.144	0.076	0.106	0.077	0.085	0.056	0.058	0.101	0.106	0.058	0.058	0.037	0.138
3671	0.068	0.047	0.066	0.053	0.070	0.037	0.052	0.038	0.042	0.027	0.028	0.049	0.052	0.028	0.028	0.018	0.068
3672	0.102	0.070	0.097	0.127	0.161	0.089	0.125	0.091	0.063	0.040	0.068	0.119	0.125	0.068	0.068	0.043	0.102
3673	0.084	0.057	0.080	0.122	0.132	0.099	0.140	0.102	0.051	0.033	0.076	0.113	0.140	0.076	0.076	0.048	0.084

TABLE 1A

WATER USE PER EMPLOYEE (MILLION GALLONS PER YEAR) FOR EACH WATER USE REGION AND SIC CODE

SIC	REGION NUMBER *1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
3674	0.130	0.125	0.174	0.101	0.135	0.071	0.100	0.073	0.080	0.068	0.054	0.095	0.100	0.054	0.054	0.034	0.130
3679	0.114	0.078	0.108	0.117	0.157	0.082	0.116	0.084	0.070	0.045	0.063	0.110	0.116	0.063	0.063	0.040	0.114
369	0.106	0.072	0.101	0.154	0.166	0.149	0.259	0.147	0.065	0.042	0.141	0.142	0.259	0.141	0.141	0.089	0.106
3691	0.283	0.193	0.268	0.287	0.382	0.201	0.283	0.206	0.173	0.112	0.154	0.268	0.283	0.154	0.154	0.098	0.283
3692	0.033	0.023	0.031	0.048	0.052	0.047	0.083	0.046	0.020	0.013	0.048	0.044	0.083	0.048	0.048	0.030	0.033
3694	0.055	0.038	0.053	0.080	0.087	0.078	0.124	0.077	0.034	0.022	0.068	0.074	0.124	0.068	0.068	0.043	0.055
37	0.043	0.097	0.076	0.238	0.102	0.095	0.086	0.145	0.085	0.086	0.031	0.031	0.070	0.031	0.031	0.047	0.119
371	0.105	0.106	0.185	0.398	0.112	0.225	0.095	0.159	0.093	0.095	0.034	0.034	0.171	0.034	0.034	0.052	0.233
3711	0.201	0.054	0.139	0.203	0.057	0.115	0.048	0.081	0.047	0.048	0.017	0.017	0.128	0.017	0.017	0.027	0.119
3714	0.043	0.157	0.079	0.236	0.132	0.094	0.140	0.236	0.138	0.140	0.040	0.040	0.070	0.040	0.040	0.077	0.118
372	0.015	0.075	0.027	0.084	0.047	0.034	0.083	0.101	0.082	0.083	0.014	0.014	0.025	0.014	0.014	0.046	0.042
3722	0.019	0.092	0.033	0.103	0.058	0.041	0.144	0.124	0.197	0.144	0.018	0.018	0.031	0.018	0.018	0.083	0.052
3729	0.048	0.041	0.085	0.155	0.044	0.088	0.037	0.062	0.036	0.037	0.013	0.013	0.079	0.013	0.013	0.020	0.091
373	0.006	0.030	0.011	0.034	0.019	0.014	0.047	0.041	0.065	0.047	0.006	0.006	0.010	0.006	0.006	0.027	0.017
3731	0.006	0.030	0.011	0.034	0.019	0.014	0.047	0.041	0.065	0.047	0.006	0.006	0.010	0.006	0.006	0.027	0.017
374	0.016	0.063	0.029	0.091	0.051	0.036	0.056	0.095	0.055	0.056	0.016	0.016	0.027	0.016	0.016	0.031	0.046

PROJECTION INDICES: OUTPUT AND WATER PRODUCTIVITY

Projection Indices: Output and Water Productivity

This table shows the relationship between annual rates of physical production and water intake, from which the water productivity indices (unit intake multipliers) are derived. An index number below 1.0 shows efficient water use by that industry (water intake per unit output is declining).

Production Index (Output): a measure of change in physical production (or, failing data, of sales or value added, adjusted for price level shifts) between 1959 and 1968.

Water Intake: a measure of change in physical volume of water intake between 1959 and 1968.

Water Productivity Index (Unit Intake Multiplier): developed from annual percent change in output and water intake; e.g. for SIC 201, 3.4 - 2.6 = 0.8; 1.000 less .008 = .992 (index number).

For projecting future waste treatment needs, the assumption was made that output of goods and intake of water would sustain the relationships that existed over the period 1959-1968. Thus, the derived annual output and unit intake multipliers were applied to the hypothesized capital requirements for each year of the period of the projection for each industrial category.

PROJECTION INDICES: OUTPUT AND WATER PRODUCTIVITY
1959-1968

SIC	Industry Name and Production Measure Used (incl. source)	PRODUCTION Index or Physical Quantities[1] 1959 or 1964	1968	ANNUAL PERCENT CHANGE Output	Water Intake[2]	OUTPUT MULTIPLIER	UNIT INTAKE MULTIPLIER
201	Meat Products - Bus. Stat.,[3] Total Meats - million lbs. 1959, 68	24272	32717	3.4	2.6	1.034	.992
202	Dairy Products - Bus. Stat., Production of Creamery Butter, Cheese, Condensed and Evaporated Milk, Fluid Milk, Dry Milk - million lbs., 1959, 68	128849	123534	-0.5	4.4	.995	1.049
203	Canned and Preserved Fruits, Vegetables, and Sea Foods - Agricultural Statistics[4]- Add Canned (per capita consumption x U.S. Population) and Frozen (total as given) in (ooo)'s lbs. - tables 291, 2 in 1968; tables 292, 3 in 1970 - 1959, 68	8128601	14250612	6.4	3.5	1.064	.971
2041-5	Grain Mill Products - Bus. Stat., Wheat Flour - thousands of 100 lb. sacks, 1964, 68	261663	254185	-0.7	6.6	.993	1.073
2046	Wet Corn Milling - Assume Production characteristics same as in 203 above	--	--	6.4	4.1	1.064	.977
205	Bakery Products - Bus. Stat., - deflate confectionery manufacturers' sales by WPI for Cereal and Bakery Products (mill. dollars), 1959, 68	1137.5	1442.5	2.7	-2.4	1.027	.949
207	Confectionery and Related Products - Assume Production Characteristics same as in 205 above	--	--	2.7	-0.6	1.027	.967
2061-2	Cane Sugar, Agri. Stat., (ooo)'s raw tons, Continental U.S. - (table 123, 1970) 1959, 68	615	1209	7.8	3.2	1.078	.954
2063	Beet Sugar, Agri. Stat., (ooo)'s tons, Continental U.S. - (table 123, 1970) 1959, 68	2340	3467	4.5	-0.7	1.045	.948

	Industry Name and Production Measure Used (incl. source)	PRODUCTION Index or Physical Quantities[1] 1959 or 1964	1968	ANNUAL PERCENT CHANGE Output	Water Intake[2]	OUTPUT MULTIPLIER	UNIT INTAKE MULTIPLIER
208	Beverages - Federal Reserve Index,[5] Beverages, 1959,68	103.2	156.5	4.7	2.0	1.047	.973
209	Miscellaneous Food Preparations and Kindred Products - Bus. Stat., Millions lbs. coconut oil, corn oil, cottonseed oil, linseed oil, soybean oil (total all categories), 1964, 68	8063	8417	1.1	0.4	1.011	.993
2211	Broad Woven Fabric Mills, Cotton - Bus. Stat., Millions of lin. yds. of cotton cloth production, 1959, 68	9603	7454	-2.8	-2.5	.972	1.003
2221	Broad Woven Fabric Mills, Man-made fiber and silk - Bus. Stat., Millions of linear yards of man-made fiber and silk fabrics production, 1959, 68	2500	5280	8.7	7.1	1.087	.984
2231	Broad Woven Fabric Mills, Wool: Including Dying and Finishing - Bus. Stat., Millions of linear yards of woolen and worsted woven goods production, 1959, 68	310.8	243.3	-2.7	0.7	.973	1.034
22XX excl(2211,21,31)	Other Textiles - Federal Reserve, Textile Mill products, 1959, 68	109.0	151.5	3.7	6.7	1.037	1.030
2400	Lumber and Wood Products - Federal Reserve, Lumber and products, 1959, 68	108.3	122.3	1.4	-1.9	1.014	.967
2611	Pulp Mills - Bus. Stat., Woodpulp Production, (ooo)'s of short tons, 1959, 68	24383	37903	5.0	0.2	1.050	.952
2621	Paper Mills - Bus. Stat., Paper and Board Production, (ooo)'s of short tons, 1959, 68	34015	49444	4.2	1.0	1.042	.968

	Industry Name and Production Measure Used (incl. source)	PRODUCTION Index or Physical Quantities[1] 1959 or 1964	1968	ANNUAL PERCENT CHANGE Output	Water Intake[2]	OUTPUT MULTIPLIER	UNIT INTAKE MULTIPLIER
2631	Paperboard Mills - Bus. Stat., Paperboard production, (ooo)'s of short tons (weekly avg.), 1959,68	307	480	5.1	4.7	1.051	.996
264	Converted Paper and Paperboard Products - Bus. Stat., Fine paper Printing Paper and Coarse Paper, combined total production, (ooo)'s short tons, 1964,68	12219	14590	4.5	4.5	1.045	1.000
265	Paperboard Containers and Boxes - Bus. Stat., Shipping Containers, million sq. ft. surface, 1964, 68	137261	173834	6.1	4.7	1.061	.986
266	Building Paper and Building Board Mills - Bus. Stat.- Construction Paper and Board Production, (ooo)'s short tons, 1959, 68	3340	4358	3.0	-4.3	1.030	.927
2812	Alkalies and Chlorine - Bus. Stat., Inorganic Chemicals[6] 1959, 68	100.0	192.2	7.5	-3.2	1.075	.893
2813	Industrial Gases - Bus. Stat., Inorganic Chemicals[6] 1959, 68	100.0	192.2	7.5	2.9[8]	1.075	.954
2815	Cyclic Intermediates, Dyes, Organic Pigments, and Cyclic Crudes - Bus. Stat., Organic Chemicals[7], 1959, 68	100.0	164.4	5.7	0.4	1.057	.947
2816	Inorganic Pigments - Bus. Stat., Inorganic Chemicals[6], 1959, 68	100.0	192.2	7.5	2.9[8]	1.075	.954

	Industry Name and Production Measure Used (incl. source)	PRODUCTION Index or Physical Quantities[1] 1959 or 1964	1968	ANNUAL PERCENT CHANGE Output	Water Intake[2]	OUTPUT MULTIPLIER	UNIT INTAKE MULTIPLIER
2818	Industrial Organic Chemicals - Bus. Stat., Organic Chemicals[7], 1959, 68	100.0	164.4	5.7	4.6	1.057	.989
2819	Industrial Inorganic Chemicals - Bus. Stat., Inorganic Chemicals[6] 1959, 68	100.0	192.2	7.5	4.0	1.075	.965
282	Plastic Materials and Synthetic Resins, Synthetic Rubber, Synthetic and Other Man-Made Fibers, Except Glass - Bus. Stat., (ooo)'s lbs. Plastics and Resin Materials Production, 1959, 68	5603835	1370290[4]	10.4	5.1	1.104	.947
283	Drugs - Federal Reserve, Drugs, soap and toiletries, 1959, 68	106.4	193.4	6.9	0.7	1.069	.938
284	Soap, Detergents, and Cleaning Preparations, Perfumes, Cosmetics, and Other Toilet Preparations - Federal Reserve, Drugs, soap and toiletries, 1959, 68	106.4	193.4	6.9	1.1	1.069	.942
2851	Paints, Varnishes, Lacquers, Enamels and Allied Products - Bus. Stat., deflate mill. of dollars factory shipments paints, varnish and lacquer by WPI for prepared paint	1718.8	2257.5	3.1	-1.5	1.031	.954
2861	Gum and Wood Chemicals - Bus. Stat., Organic Chemicals[7], 1959, 68	100.0	164.4	5.7	-5.2[9]	1.057	.891
287	Agricultural Chemicals - Federal Reserve, Chemicals and Products, 1964, 68	159.6	221.7	8.6	3.3	1.086	.947

	Industry Name and Production Measure Used (incl. source)	PRODUCTION Index or Physical Quantities[1] 1959 or 1964	1968	ANNUAL PERCENT CHANGE Output	Water Intake[2]	OUTPUT MULTIPLIER	UNIT INTAKE MULTIPLIER
289	Miscellaneous Chemical Products - Federal Reserve, Chemicals and Products, 1964, 68	159.6	221.7	8.6	23.0	1.086	1.144
29XX	Petroleum Refining and Related Industries[10], 1959, 68	---	---	0[10]	0.9	1.000	1.009
2911	Petroleum Refining - Federal Reserve, Petroleum Products, 1959, 68	103.7	139.6	3.4	0.9	1.034	.975
3000	Rubber and Miscellaneous Plastic Products - Federal Reserve, Rubber and Plastics Products, 1959, 68	110.7	222.0	8.0	5.1	1.080	.971
31XX	Leather and Leather Products - Federal Reserve, Leather and Products, 1959, 68	105.0	111.0	0.6	3.2	1.006	1.026
3111	Leather Tanning and Finishing - Bus. Stat., Leather Production, (ooo)'s of skins, hides, kips, (total all)	81591	66457	-2.6	2.5	.974	1.051
3211	Flat Glass - Bus. Stat., deflate (ooo)'s dollars manuf. shipments by WPI for Nonmetallic Mineral Production, 1959, 68	329776	358592	0.9	0	1.009	.991
322	Glass and Glassware, Pressed or Blown - Bus. Stat., Production of Glass Containers, (ooo)'s of Gross	154404	225579[11]	4.9	0	1.049	.951

	Industry Name and Production Measure Used (incl. source)	PRODUCTION Index or Physical Quantities[1] 1959 or 1964	1968	ANNUAL PERCENT CHANGE Output	Water Intake[2]	OUTPUT MULTIPLIER	UNIT INTAKE MULTIPLIER
3231	Glass Products, Made of Purchased Glass - Assume production characteristics same as in 3211, Flat Glass, above	---	--	0.9	-2.0	1.009	.971
3241	Cement, hydraulic - Bus. Stat., (000)'s barrels shipments of Portland cement	337966	397343	1.8	-1.5	1.018	.967
325	Structural Clay Products - Bus. Stat., Brick, unglazed, millions of std. brick shipments, 1964, 68	7743.8	7537.7	-0.7	0	.993	1.007
326	Pottery and Related Products - Assume production characteristics same as 325, above	---	---	-0.7	0	.993	1.007
327	Concrete, Gypsum and Plaster Products - Bus. Stat., Gypsum, (000)'s short tons, calcined production, 1959, 68	9268.3	8843.8	-0.5	4.6	.995	1.051
3281	Cut Stone and Stone Products - Federal Reserve, Clay, Glass and Stone Products, 1959, 68	108.2	146.2	3.4	3.2	1.034	.998
329	Nonmetallic Mineral Products - Federal Reserve, Clay, Glass and Stone Products, 1959, 68	108.2	146.2	3.4	2.5	1.034	.991
331	Blast Furnaces, Steel Works and Rolling and Finishing Mills - Bus. Stat., Sheets and strip, (000)'s short tons net shipments, 1964, 68	34222	36624	1.7	2.1	1.017	1.004
3312	Blast Furnaces and Steel Mills - Bus. Stat., Production Index, raw steel, 1959, 68	96.2	135.0	3.8	3.5	1.038	.997

	Industry Name and Production Measure Used (incl. source)	PRODUCTION Index or Physical Quantities[1] 1959 or 1964	1968	ANNUAL PERCENT CHANGE Output	Water Intake[2]	OUTPUT MULTIPLIER	UNIT INTAKE MULTIPLIER
332	Iron and Steel Foundries - Bus. Stat., Malleable iron castings, (ooo)'s short tons shipments 1959, 68	916	1094	2.0	1.7	1.020	.997
3331	Primary Smelting and Refining of Copper - Bus. Stat., Copper production, (ooo)'s short tons primary refinery, 1959, 68	1098.2	1437.4	3.0	2.4	1.030	.994
3332, 3333	Primary Smelting and Refining of Lead, Zinc - Bus. Stat., (ooo)'s short tons-mine recoverable Lead plus primary smelter production of Slab Zinc, 1959, 68	1054.3	1380.1	3.0	6.4	1.030	1.034
3334	Primary Production of Aluminum - Bus. Stat., (ooo)'s short tons of Production, Primary Aluminum 1959, 68	1954.1	3255.0	5.8	1.6	1.058	.958
3341	Secondary Smelting and Refining of Nonferrous Metals - Federal Reserve, Nonferrous metals and products, 1964[12], 1968	138.3	160.0	3.7	0	1.037	.963
335	Rolling, Drawing and Extruding of Nonferrous Metals - Federal Reserve, Nonferrous metals and products, 1964[12] 1968	138.3	160.0	3.7	4.3	1.037	1.006

	Industry Name and Production Measure Used (incl. source)	PRODUCTION Index or Physical Quantities[1] 1959 or 1964	1968	ANNUAL PERCENT CHANGE Output	Water Intake[2]	OUTPUT MULTIPLIER	UNIT INTAKE MULTIPLIER
336	Nonferrous Foundries - Federal Reserve, Nonferrous metals and products, 1964[12], 1968	138.3	160.0	3.7	12.0	1.037	1.083
339	Miscellaneous Primary Metal Products - Federal Reserve, Nonferrous metals and products, 1964[12], 1968	138.3	160.0	3.7	16.7	1.037	1.130
3400	Fabricated Metal Products (except ord., machinery, and trans. equip.)- Federal Reserve, Fabricated metal products, 1959, 68	105.4	167.9	5.3	5.0	1.053	.997
3500	Machinery, Except Electrical - Federal Reserve, Nonelectrical Machinery, 1959, 68	105.3	181.0	6.2	1.1	1.062	.949
3600	Electrical Machinery, Equipment and Supplies - Federal Reserve, Electrical Machinery, 1959, 68	109.1	188.5	6.3	3.5	1.063	.972
3700	Transportation Equipment - Federal Reserve, Transportation Equipment, 1959, 68	104.3	179.5	6.2	2.1	1.062	.959
3900	Miscellaneous Manufacturing Industries - Federal Reserve, Miscellaneous Manufactures, 1959, 68	107.6	161.4	4.6	0	1.046	.954

FOOTNOTES

1. In some cases, water intake data were not available for 1959; consequently 1964 production data were used with 1964 water intake data.
2. Computed from billions gallons water intake, 1963 and 1967 Census of Manufactures, Water Use in Manufacturing, U.S. Department of Commerce.
3. 1969 Business Statistics, U. S. Dept. of Commerce.
4. U. S. Dept. of Agriculture, Agriculture Statistics, 1968, 70.
5. From Federal Reserve Bulletin; 1968 Index from any bulletin in late 1969 (monthly); 1964 (where used) from any bulletin in late 1965. 1959 Index computed by re-basing 1959 index (as published in earlier years, on 1957 = 100 base) to 1957-59 = 100 so as to conform to later years for consistency. This applies in all cases where we used the Federal Reserve Production Index.
6. Average of Indexes computed from production aggregates - Inorganic Chemicals Production (include sulfur, which appears in misc. products).
7. Average of Indexes computed from production aggregates - Organic Chemicals Production (also includes Alcohol).
8. 4-digit water use not available; used 281 category for annual percent change for 2813, 2816.
9. Water intake based on 1964, 68 values (data not available for 1959).
10. Assume constant rate of output for this category; the latter is the remainder of industry 29 after the water significant component is removed.
11. 1968 not available, use 1967 as final year for annual percent change computation.
12. Federal Reserve Index for Nonferrous metals was not published in 1959; used 1964 index to compare to 1964 data for water intake.

PROJECTED INDUSTRIAL WASTE TREATMENT EXPENDITURES THROUGH 1976

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Projected Expenditures in Millions of 1967 Dollars by SIC Code

These tables show projected expenditures for waste treatment for specific SIC codes. There are three groups of costs on each table. The first group is calculated with median efficiency, that is, unit flow equal to or below the median region in which the SIC category is reported. The second group calculates costs at 1968 efficiency, that is, with flow data as it was reported for 1968. The third group costs are generated using minimum unit flow data for regions in which the SIC category is reported for all regions.

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 201 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	6.852	2.367	102.159	47.342	3.645	3.346	16.211
1969	2.628	6.852	2.367	104.787	56.823	4.375	4.016	20.239
1970	2.696	6.852	3.319	107.483	66.371	5.111	4.691	22.668
1971	2.765	6.852	3.799	110.249	75.988	5.851	5.371	24.639
1972	2.836	6.852	4.284	113.085	85.677	6.597	6.056	26.625
1973	2.909	6.852	4.772	115.995	95.438	7.349	6.746	28.628
1974	2.984	6.852	5.264	118.979	105.275	8.106	7.441	30.648
1975	3.061	6.852	5.759	122.040	115.188	8.869	8.142	32.684
1976	3.140	6.852	6.259	125.180	125.180	9.639	8.848	34.738
TOTAL	23.0	61.7	38.2			59.5	54.7	237.1

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	8.240	2.436	114.647	48.730	3.752	3.556	17.985
1969	2.950	8.240	2.436	117.597	59.919	4.614	4.373	22.612
1970	3.026	8.240	3.559	120.622	71.184	5.481	5.195	25.501
1971	3.103	8.240	4.126	123.726	82.527	6.355	6.023	27.847
1972	3.183	8.240	4.698	126.909	93.950	7.234	6.857	30.211
1973	3.265	8.240	5.273	130.174	105.455	8.120	7.696	32.594
1974	3.349	8.240	5.852	133.523	117.044	9.012	8.542	34.995
1975	3.435	8.240	6.436	136.958	128.719	9.911	9.394	37.416
1976	3.524	8.240	7.024	140.482	140.482	10.817	10.252	39.857
TOTAL	25.8	74.2	41.8			65.3	61.9	269.0

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	4.122	2.231	77.589	44.612	3.435	3.010	12.798
1969	1.996	4.122	2.231	79.585	50.730	3.906	3.423	15.678
1970	2.048	4.122	2.845	81.633	56.900	4.381	3.839	17.235
1971	2.100	4.122	3.156	83.733	63.122	4.860	4.259	18.498
1972	2.154	4.122	3.470	85.887	69.399	5.344	4.682	19.772
1973	2.210	4.122	3.787	88.097	75.731	5.831	5.110	21.059
1974	2.267	4.122	4.106	90.364	82.119	6.323	5.541	22.358
1975	2.325	4.122	4.428	92.688	88.566	6.820	5.976	23.671
1976	2.385	4.122	4.754	95.073	95.073	7.321	6.415	24.996
TOTAL	17.5	37.1	31.0			48.2	42.3	176.1

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 202 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	7.078	0.472	66.057	9.436	0.727	0.490	8.766
1969	2.890	7.078	0.472	68.947	19.404	1.494	1.007	12.941
1970	3.017	7.078	1.475	71.964	29.498	2.271	1.530	15.371
1971	3.149	7.078	1.986	75.113	39.725	3.059	2.061	17.332
1972	3.287	7.078	2.504	78.399	50.089	3.857	2.599	19.324
1973	3.430	7.078	3.030	81.830	60.597	4.666	3.144	21.348
1974	3.580	7.078	3.563	85.410	71.255	5.487	3.697	23.404
1975	3.737	7.078	4.103	89.147	82.070	6.319	4.258	25.495
1976	3.901	7.078	4.652	93.048	93.048	7.165	4.827	27.623
TOTAL	27.0	63.7	22.3			35.0	23.6	171.6

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	7.630	0.499	71.025	9.988	0.769	0.530	9.428
1969	3.108	7.630	0.499	74.133	20.725	1.596	1.100	13.933
1970	3.244	7.630	1.580	77.376	31.598	2.433	1.677	16.564
1971	3.386	7.630	2.131	80.762	42.614	3.281	2.262	18.689
1972	3.534	7.630	2.689	84.296	53.777	4.141	2.854	20.848
1973	3.688	7.630	3.255	87.984	65.095	5.012	3.455	23.040
1974	3.850	7.630	3.829	91.834	76.574	5.896	4.065	25.269
1975	4.018	7.630	4.411	95.852	88.222	6.793	4.683	27.535
1976	4.194	7.630	5.002	100.046	100.046	7.704	5.310	29.840
TOTAL	29.0	68.7	23.9			37.6	25.9	185.1

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	4.965	0.366	47.043	7.323	0.564	0.361	6.256
1969	2.058	4.965	0.366	49.101	14.346	1.105	0.707	9.201
1970	2.148	4.965	1.073	51.250	21.460	1.652	1.058	10.897
1971	2.242	4.965	1.433	53.492	28.667	2.207	1.413	12.261
1972	2.341	4.965	1.799	55.833	35.973	2.770	1.773	13.647
1973	2.443	4.965	2.169	58.276	43.381	3.340	2.138	15.056
1974	2.550	4.965	2.545	60.826	50.896	3.919	2.509	16.488
1975	2.661	4.965	2.926	63.487	58.522	4.506	2.885	17.944
1976	2.778	4.965	3.313	66.265	66.265	5.102	3.267	19.425
TOTAL	19.2	44.7	16.0			25.2	16.1	121.2

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 203 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	17.051	3.743	211.256	74.851	5.764	3.296	29.853
1969	7.002	17.051	3.743	218.258	98.903	7.616	4.355	39.766
1970	7.234	17.051	6.159	225.492	123.188	9.485	5.425	45.354
1971	7.474	17.051	7.386	232.966	147.712	11.374	6.505	49.789
1972	7.721	17.051	8.624	240.687	172.484	13.281	7.596	54.273
1973	7.977	17.051	9.876	248.664	197.512	15.208	8.698	58.810
1974	8.242	17.051	11.140	256.906	222.805	17.156	9.812	63.400
1975	8.515	17.051	12.419	265.421	248.370	19.125	10.937	68.046
1976	8.797	17.051	13.711	274.218	274.218	21.115	12.076	72.749
TOTAL	63.0	153.5	76.8			120.1	68.7	482.0

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	19.378	3.859	232.199	77.178	5.943	3.508	32.687
1969	7.696	19.378	3.859	239.895	104.251	8.027	4.738	43.698
1970	7.951	19.378	6.579	247.846	131.580	10.132	5.981	50.020
1971	8.215	19.378	7.959	256.061	159.172	12.256	7.235	55.042
1972	8.487	19.378	9.352	264.548	187.037	14.402	8.501	60.120
1973	8.768	19.378	10.759	273.316	215.183	16.569	9.781	65.255
1974	9.059	19.378	12.181	282.375	243.619	18.759	11.073	70.449
1975	9.359	19.378	13.618	291.734	272.356	20.971	12.379	75.705
1976	9.669	19.378	15.070	301.403	301.403	23.208	13.699	81.025
TOTAL	69.2	174.4	83.2			130.3	76.9	534.0

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	10.547	3.417	152.721	68.347	5.263	2.789	22.016
1969	5.062	10.547	3.417	157.783	83.955	6.465	3.426	28.917
1970	5.230	10.547	4.987	163.012	99.732	7.679	4.070	32.513
1971	5.403	10.547	5.784	168.415	115.681	8.907	4.721	35.362
1972	5.582	10.547	6.591	173.997	131.810	10.149	5.380	38.248
1973	5.767	10.547	7.406	179.764	148.124	11.406	6.045	41.171
1974	5.958	10.547	8.231	185.722	164.629	12.676	6.719	44.132
1975	6.156	10.547	9.067	191.878	181.331	13.962	7.401	47.132
1976	6.360	10.547	9.912	198.237	198.237	15.264	8.091	50.173
TOTAL	45.5	94.9	58.8			91.8	48.6	339.7

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 2041-5 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.608	0.215	17.167	4.300	0.331	2.191	4.345
1969	1.124	1.608	0.215	18.291	7.033	0.542	3.583	7.072
1970	1.198	1.608	0.492	19.489	9.839	0.758	5.012	9.068
1971	1.276	1.608	0.636	20.765	12.724	0.980	6.482	10.982
1972	1.360	1.608	0.785	22.125	15.692	1.208	7.994	12.955
1973	1.449	1.608	0.937	23.574	18.749	1.444	9.551	14.990
1974	1.544	1.608	1.095	25.118	21.902	1.686	11.157	17.090
1975	1.645	1.608	1.258	26.763	25.155	1.937	12.814	19.262
1976	1.753	1.608	1.426	28.516	28.516	2.196	14.526	21.509
TOTAL	11.3	14.5	7.1			11.1	73.3	117.3

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.753	0.222	18.472	4.445	0.342	0.232	2.550
1969	1.210	1.753	0.222	19.682	7.408	0.570	0.387	4.143
1970	1.289	1.753	0.523	20.971	10.451	0.805	0.546	4.915
1971	1.373	1.753	0.679	22.344	13.577	1.045	0.709	5.560
1972	1.463	1.753	0.840	23.807	16.794	1.293	0.877	6.227
1973	1.559	1.753	1.005	25.366	20.106	1.548	1.050	6.916
1974	1.661	1.753	1.176	27.028	23.521	1.811	1.229	7.630
1975	1.770	1.753	1.352	28.798	27.044	2.082	1.413	8.371
1976	1.886	1.753	1.534	30.684	30.684	2.363	1.603	9.139
TOTAL	12.2	15.8	7.6			11.9	8.0	55.5

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.008	0.185	11.765	3.700	0.285	0.171	1.649
1969	0.770	1.008	0.185	12.535	5.479	0.422	0.253	2.639
1970	0.821	1.008	0.365	13.356	7.308	0.563	0.338	3.095
1971	0.875	1.008	0.460	14.231	9.191	0.708	0.425	3.475
1972	0.932	1.008	0.557	15.163	11.131	0.857	0.515	3.868
1973	0.993	1.008	0.657	16.156	13.132	1.011	0.607	4.276
1974	1.058	1.008	0.760	17.214	15.198	1.170	0.703	4.699
1975	1.127	1.008	0.867	18.341	17.333	1.335	0.801	5.138
1976	1.201	1.008	0.977	19.543	19.543	1.505	0.904	5.595
TOTAL	7.8	9.1	5.0			7.9	4.7	34.4

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 2046 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.631	0.192	16.885	3.833	0.295	0.183	2.301
1969	0.667	1.631	0.192	17.552	6.132	0.472	0.292	3.255
1970	0.694	1.631	0.423	18.246	8.458	0.651	0.403	3.802
1971	0.721	1.631	0.541	18.967	10.810	0.832	0.515	4.240
1972	0.750	1.631	0.660	19.717	13.191	1.016	0.628	4.685
1973	0.779	1.631	0.780	20.497	15.602	1.201	0.743	5.135
1974	0.810	1.631	0.902	21.307	18.044	1.389	0.859	5.592
1975	0.842	1.631	1.026	22.149	20.518	1.580	0.977	6.056
1976	0.876	1.631	1.151	23.025	23.025	1.773	1.096	6.527
TOTAL	6.1	14.7	5.9			9.2	5.7	41.6

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.772	0.199	18.146	3.974	0.306	0.191	2.467
1969	0.717	1.772	0.199	18.863	6.462	0.498	0.310	3.495
1970	0.746	1.772	0.449	19.609	8.980	0.691	0.431	4.089
1971	0.775	1.772	0.576	20.384	11.526	0.888	0.553	4.564
1972	0.806	1.772	0.705	21.190	14.104	1.086	0.677	5.045
1973	0.838	1.772	0.836	22.027	16.713	1.287	0.802	5.534
1974	0.871	1.772	0.968	22.898	19.355	1.490	0.929	6.029
1975	0.905	1.772	1.102	23.803	22.032	1.696	1.058	6.532
1976	0.941	1.772	1.237	24.744	24.744	1.905	1.188	7.043
TOTAL	6.6	15.9	6.3			9.8	6.1	44.8

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.041	0.162	11.567	3.243	0.250	0.138	1.591
1969	0.457	1.041	0.162	12.024	4.740	0.365	0.202	2.227
1970	0.475	1.041	0.313	12.500	6.256	0.482	0.267	2.578
1971	0.494	1.041	0.390	12.994	7.791	0.600	0.333	2.857
1972	0.514	1.041	0.467	13.507	9.345	0.720	0.399	3.140
1973	0.534	1.041	0.546	14.041	10.919	0.841	0.466	3.428
1974	0.555	1.041	0.626	14.596	12.515	0.964	0.534	3.719
1975	0.577	1.041	0.707	15.173	14.133	1.088	0.604	4.016
1976	0.600	1.041	0.789	15.773	15.773	1.215	0.674	4.317
TOTAL	4.2	9.4	4.2			6.5	3.6	27.9

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 2054207 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	3.174	0.159	28.562	3.174	0.244	0.156	3.733
1969	-0.461	3.174	0.159	28.101	5.886	0.453	0.290	3.614
1970	-0.453	3.174	0.430	27.648	8.606	0.663	0.423	4.237
1971	-0.446	3.174	0.567	27.202	11.334	0.873	0.558	4.724
1972	-0.439	3.174	0.703	26.763	14.069	1.083	0.692	5.213
1973	-0.432	3.174	0.841	26.331	16.810	1.294	0.827	5.704
1974	-0.425	3.174	0.978	25.906	19.559	1.506	0.962	6.195
1975	-0.418	3.174	1.116	25.488	22.315	1.718	1.098	6.687
1976	-0.411	3.174	1.254	25.077	25.077	1.931	1.234	7.181
TOTAL	-3.5	28.6	6.2			9.8	6.2	47.3

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	3.364	0.168	30.273	3.364	0.259	0.167	3.958
1969	-0.488	3.364	0.168	29.785	6.239	0.480	0.310	3.834
1970	-0.481	3.364	0.456	29.304	9.122	0.702	0.453	4.495
1971	-0.473	3.364	0.601	28.831	12.013	0.925	0.596	5.013
1972	-0.465	3.364	0.746	28.366	14.911	1.148	0.740	5.533
1973	-0.458	3.364	0.891	27.908	17.817	1.372	0.885	6.053
1974	-0.450	3.364	1.037	27.458	20.731	1.596	1.029	6.575
1975	-0.443	3.364	1.183	27.015	23.651	1.821	1.174	7.099
1976	-0.436	3.364	1.329	26.579	26.579	2.047	1.320	7.623
TOTAL	-3.7	30.3	6.6			10.4	6.7	50.2

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	2.459	0.123	22.131	2.459	0.189	0.118	2.890
1969	-0.357	2.459	0.123	21.774	4.561	0.351	0.219	2.796
1970	-0.351	2.459	0.333	21.423	6.669	0.513	0.321	3.276
1971	-0.346	2.459	0.439	21.077	8.782	0.676	0.423	3.651
1972	-0.340	2.459	0.545	20.737	10.901	0.839	0.525	4.028
1973	-0.335	2.459	0.651	20.402	13.025	1.003	0.627	4.405
1974	-0.329	2.459	0.758	20.073	15.155	1.167	0.729	4.784
1975	-0.324	2.459	0.865	19.749	17.290	1.331	0.832	5.163
1976	-0.319	2.459	0.972	19.431	19.431	1.496	0.935	5.543
TOTAL	-2.7	22.1	4.8			7.6	4.7	36.5

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 2061-2 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	19.169	1.851	190.379	37.026	2.851	2.535	26.406
1969	5.409	19.169	1.851	195.788	61.604	4.744	4.217	35.390
1970	5.563	19.169	4.317	201.351	86.336	6.648	5.910	41.606
1971	5.721	19.169	5.561	207.072	111.226	8.564	7.614	46.629
1972	5.883	19.169	6.814	212.955	136.278	10.493	9.329	51.688
1973	6.050	19.169	8.075	219.005	161.498	12.435	11.055	56.785
1974	6.222	19.169	9.344	225.228	186.890	14.390	12.793	61.920
1975	6.399	19.169	10.623	231.627	212.458	16.359	14.543	67.094
1976	6.581	19.169	11.910	238.208	238.208	18.342	16.306	72.309
TOTAL	47.8	172.5	60.3			94.8	84.3	459.8

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	20.176	1.902	199.439	38.033	2.929	2.622	27.628
1969	5.666	20.176	1.902	205.105	63.875	4.918	4.404	37.067
1970	5.827	20.176	4.494	210.933	89.878	6.921	6.197	43.615
1971	5.993	20.176	5.802	216.926	116.047	8.936	8.002	48.909
1972	6.163	20.176	7.119	223.089	142.386	10.964	9.818	54.240
1973	6.338	20.176	8.445	229.428	168.900	13.005	11.646	59.611
1974	6.518	20.176	9.780	235.946	195.595	15.061	13.487	65.022
1975	6.704	20.176	11.124	242.650	222.474	17.131	15.340	70.474
1976	6.894	20.176	12.477	249.544	249.544	19.215	17.207	75.969
TOTAL	50.1	181.6	63.0			99.1	88.7	482.5

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	10.557	1.421	112.869	28.414	2.188	1.789	15.955
1969	3.207	10.557	1.421	116.076	42.178	3.248	2.656	21.088
1970	3.298	10.557	2.802	119.374	56.032	4.314	3.529	24.500
1971	3.392	10.557	3.499	122.765	69.981	5.389	4.407	27.243
1972	3.488	10.557	4.201	126.253	84.026	6.470	5.292	30.008
1973	3.587	10.557	4.908	129.841	98.170	7.559	6.182	32.794
1974	3.689	10.557	5.621	133.530	112.416	8.656	7.079	35.602
1975	3.794	10.557	6.338	137.323	126.767	9.761	7.983	38.433
1976	3.902	10.557	7.061	141.225	141.225	10.874	8.894	41.288
TOTAL	28.4	95.0	37.3			58.5	47.8	266.9

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 2063 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	2.544	2.841	77.168	56.814	4.375	3.405	13.165
1969	-0.721	2.544	2.841	76.447	58.638	4.515	3.514	12.694
1970	-0.714	2.544	3.023	75.733	60.468	4.656	3.624	13.134
1971	-0.707	2.544	3.115	75.026	62.305	4.797	3.734	13.484
1972	-0.701	2.544	3.207	74.325	64.148	4.939	3.845	13.835
1973	-0.694	2.544	3.300	73.631	65.998	5.082	3.956	14.187
1974	-0.688	2.544	3.393	72.943	67.855	5.225	4.067	14.541
1975	-0.681	2.544	3.486	72.262	69.718	5.368	4.178	14.896
1976	-0.675	2.544	3.579	71.587	71.587	5.512	4.291	15.251
TOTAL	-5.6	22.9	28.8			44.5	34.6	125.2

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	4.301	2.929	92.980	58.571	4.510	3.654	15.393
1969	-0.868	4.301	2.929	92.112	62.004	4.774	3.868	15.003
1970	-0.860	4.301	3.272	91.251	65.445	5.039	4.082	15.835
1971	-0.852	4.301	3.445	90.399	68.893	5.305	4.298	16.496
1972	-0.844	4.301	3.618	89.555	72.350	5.571	4.513	17.158
1973	-0.836	4.301	3.791	88.718	75.815	5.838	4.729	17.822
1974	-0.829	4.301	3.964	87.890	79.287	6.105	4.946	18.488
1975	-0.821	4.301	4.138	87.069	82.768	6.373	5.163	19.155
1976	-0.813	4.301	4.313	86.255	86.255	6.642	5.381	19.823
TOTAL	-6.7	38.7	32.4			50.2	40.6	155.2

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	-0.307	2.698	51.510	53.963	4.155	2.962	9.508
1969	-0.481	-0.307	2.698	51.029	53.176	4.095	2.918	8.923
1970	-0.477	-0.307	2.620	50.552	52.392	4.034	2.875	8.746
1971	-0.472	-0.307	2.581	50.080	51.613	3.974	2.833	8.609
1972	-0.468	-0.307	2.542	49.612	50.839	3.915	2.790	8.472
1973	-0.463	-0.307	2.503	49.149	50.069	3.855	2.748	8.337
1974	-0.459	-0.307	2.465	48.690	49.303	3.796	2.706	8.202
1975	-0.455	-0.307	2.427	48.235	48.542	3.738	2.664	8.067
1976	-0.451	-0.307	2.389	47.785	47.785	3.679	2.623	7.934
TOTAL	-3.7	-2.8	22.9			35.2	25.1	76.8

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 208 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	10.741	0.783	101.581	15.655	1.205	0.677	13.406
1969	1.903	10.741	0.783	103.484	28.298	2.179	1.224	16.829
1970	1.938	10.741	2.049	105.422	40.977	3.155	1.773	19.656
1971	1...5	10.741	2.685	107.397	53.693	4.134	2.323	21.857
1972	2.012	10.741	3.322	109.408	66.445	5.116	2.874	24.065
1973	2.049	10.741	3.962	111.458	79.235	6.101	3.427	26.280
1974	2.088	10.741	4.603	113.545	92.064	7.089	3.982	28.503
1975	2.127	10.741	5.247	115.672	104.931	8.080	4.539	30.733
1976	2.167	10.741	5.892	117.839	117.839	9.074	5.097	32.970
TOTAL	16.3	96.7	29.3			46.1	25.9	214.3

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	11.517	0.822	108.568	16.431	1.265	0.724	14.328
1969	2.034	11.517	0.822	110.602	29.982	2.309	1.322	18.003
1970	2.072	11.517	2.179	112.673	43.571	3.355	1.921	21.043
1971	2.110	11.517	2.860	114.784	57.198	4.404	2.522	23.414
1972	2.150	11.517	3.543	116.934	70.865	5.457	3.125	25.792
1973	2.190	11.517	4.229	119.124	84.573	6.512	3.729	28.177
1974	2.231	11.517	4.916	121.355	98.321	7.571	4.335	30.570
1975	2.273	11.517	5.606	123.628	112.111	8.633	4.943	32.972
1976	2.316	11.517	6.297	125.944	125.944	9.698	5.553	35.381
TOTAL	17.4	103.7	31.3			49.2	28.2	229.7

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	7.843	0.638	75.503	12.757	0.982	0.514	9.978
1969	1.414	7.843	0.638	76.917	22.015	1.695	0.888	12.478
1970	1.441	7.843	1.565	78.358	31.299	2.410	1.262	14.521
1971	1.468	7.843	2.030	79.826	40.610	3.127	1.637	16.106
1972	1.495	7.843	2.497	81.321	49.948	3.846	2.014	17.696
1973	1.523	7.843	2.966	82.844	59.314	4.567	2.391	19.291
1974	1.552	7.843	3.435	84.396	68.709	5.291	2.770	20.891
1975	1.581	7.843	3.907	85.977	78.133	6.016	3.150	22.497
1976	1.610	7.843	4.379	87.587	87.587	6.744	3.531	24.108
TOTAL	12.1	70.6	22.1			34.7	18.2	157.6

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 209 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	10.375	0.969	102.368	19.372	1.492	1.225	14.059
1969	0.402	10.375	0.969	102.770	30.148	2.321	1.906	15.972
1970	0.403	10.375	2.046	103.173	40.925	3.151	2.587	18.563
1971	0.405	10.375	2.585	103.578	51.705	3.981	3.269	20.615
1972	0.406	10.375	3.124	103.984	62.486	4.811	3.951	22.667
1973	0.408	10.375	3.663	104.392	73.268	5.642	4.632	24.720
1974	0.410	10.375	4.203	104.801	84.052	6.472	5.314	26.773
1975	0.411	10.375	4.742	105.212	94.838	7.303	5.996	28.826
1976	0.413	10.375	5.281	105.625	105.625	8.133	6.678	30.880
TOTAL	3.3	93.4	27.6			43.3	35.6	203.1

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	11.446	1.022	112.012	20.443	1.574	1.330	15.373
1969	0.439	11.446	1.022	112.451	32.329	2.489	2.103	17.500
1970	0.441	11.446	2.211	112.893	44.216	3.405	2.877	20.380
1971	0.443	11.446	2.805	113.335	56.105	4.320	3.650	22.665
1972	0.445	11.446	3.400	113.780	67.996	5.236	4.424	24.950
1973	0.446	11.446	3.994	114.226	79.888	6.151	5.198	27.236
1974	0.448	11.446	4.589	114.675	91.782	7.067	5.972	29.522
1975	0.450	11.446	5.184	115.124	103.678	7.983	6.746	31.809
1976	0.452	11.446	5.779	115.576	115.576	8.899	7.520	34.096
TOTAL	3.6	103.0	30.0			47.1	39.8	223.5

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	7.248	0.812	74.226	16.245	1.251	0.948	10.259
1969	0.291	7.248	0.812	74.517	23.784	1.831	1.388	11.571
1970	0.292	7.248	1.566	74.810	31.324	2.412	1.829	13.347
1971	0.293	7.248	1.943	75.103	38.865	2.993	2.269	14.746
1972	0.295	7.248	2.320	75.398	46.407	3.573	2.709	16.145
1973	0.296	7.248	2.698	75.693	53.950	4.154	3.149	17.545
1974	0.297	7.248	3.075	75.990	61.495	4.735	3.590	18.944
1975	0.298	7.248	3.452	76.288	69.041	5.316	4.030	20.344
1976	0.299	7.248	3.829	76.588	76.588	5.897	4.471	21.744
TOTAL	2.4	65.2	20.5			32.2	24.4	144.6

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 221 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	5.134	0.799	57.055	15.985	1.231	0.630	7.793
1969	-1.431	5.134	0.799	55.624	19.687	1.516	0.775	6.793
1970	-1.395	5.134	1.171	54.229	23.426	1.804	0.923	7.636
1971	-1.360	5.134	1.360	52.868	27.199	2.094	1.071	8.299
1972	-1.326	5.134	1.550	51.542	31.007	2.388	1.221	8.967
1973	-1.293	5.134	1.742	50.249	34.848	2.683	1.372	9.639
1974	-1.260	5.134	1.936	48.989	38.721	2.982	1.525	10.316
1975	-1.229	5.134	2.131	47.760	42.626	3.282	1.679	10.997
1976	-1.198	5.134	2.328	46.562	46.562	3.585	1.834	11.683
TOTAL	-10.5	46.2	13.8			21.6	11.0	82.1

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	5.290	0.807	58.458	16.141	1.243	0.643	7.983
1969	-1.466	5.290	0.807	56.992	19.964	1.537	0.796	6.963
1970	-1.430	5.290	1.191	55.562	23.824	1.834	0.950	7.835
1971	-1.394	5.290	1.386	54.168	27.720	2.134	1.105	8.521
1972	-1.359	5.290	1.583	52.810	31.651	2.437	1.262	9.212
1973	-1.325	5.290	1.781	51.485	35.616	2.742	1.420	9.908
1974	-1.291	5.290	1.981	50.193	39.614	3.050	1.579	10.608
1975	-1.259	5.290	2.182	48.934	43.645	3.361	1.740	11.313
1976	-1.227	5.290	2.385	47.707	47.707	3.673	1.901	12.022
TOTAL	-10.8	47.6	14.1			22.0	11.4	84.4

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	4.892	0.787	54.882	15.743	1.212	0.613	7.504
1969	-1.377	4.892	0.787	53.505	19.259	1.483	0.750	6.535
1970	-1.342	4.892	1.140	52.163	22.809	1.756	0.888	7.335
1971	-1.308	4.892	1.320	50.855	26.393	2.032	1.027	7.963
1972	-1.276	4.892	1.500	49.579	30.010	2.311	1.168	8.596
1973	-1.244	4.892	1.683	48.335	33.658	2.592	1.310	9.233
1974	-1.212	4.892	1.867	47.123	37.338	2.875	1.453	9.875
1975	-1.182	4.892	2.052	45.941	41.049	3.161	1.598	10.521
1976	-1.152	4.892	2.239	44.789	44.789	3.449	1.743	11.171
TOTAL	-10.1	44.0	13.4			20.9	10.5	78.7

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 222 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.608	0.483	14.521	9.659	0.744	0.367	2.201
1969	1.011	0.608	0.483	15.532	11.277	0.868	0.428	3.398
1970	1.081	0.608	0.648	16.613	12.966	0.998	0.492	3.828
1971	1.156	0.608	0.737	17.769	14.730	1.134	0.559	4.194
1972	1.237	0.608	0.829	19.006	16.575	1.276	0.629	4.579
1973	1.323	0.608	0.925	20.329	18.506	1.425	0.702	4.983
1974	1.415	0.608	1.026	21.744	20.529	1.581	0.779	5.409
1975	1.514	0.608	1.133	23.258	22.650	1.744	0.859	5.857
1976	1.619	0.608	1.244	24.877	24.877	1.916	0.944	6.330
TOTAL	10.4	5.5	7.5			11.7	5.8	40.8

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.759	0.490	15.881	9.810	0.755	0.379	2.384
1969	1.105	0.759	0.490	16.986	11.674	0.899	0.451	3.705
1970	1.182	0.759	0.681	18.169	13.616	1.048	0.526	4.197
1971	1.265	0.759	0.782	19.434	15.639	1.204	0.605	4.614
1972	1.353	0.759	0.888	20.786	17.751	1.367	0.686	5.052
1973	1.447	0.759	0.998	22.233	19.956	1.537	0.772	5.512
1974	1.548	0.759	1.113	23.781	22.263	1.714	0.861	5.995
1975	1.655	0.759	1.234	25.436	24.677	1.900	0.954	6.502
1976	1.771	0.759	1.360	27.207	27.207	2.095	1.052	7.037
TOTAL	11.3	6.8	8.0			12.5	6.3	45.0

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.548	0.480	13.982	9.599	0.739	0.362	2.129
1969	0.973	0.548	0.480	14.955	11.120	0.856	0.420	3.277
1970	1.041	0.548	0.635	15.996	12.709	0.979	0.480	3.683
1971	1.113	0.548	0.719	17.110	14.370	1.107	0.543	4.029
1972	1.191	0.548	0.805	18.301	16.109	1.240	0.608	4.393
1973	1.274	0.548	0.897	19.575	17.931	1.381	0.677	4.776
1974	1.363	0.548	0.992	20.937	19.841	1.528	0.749	5.180
1975	1.457	0.548	1.092	22.395	21.847	1.682	0.825	5.605
1976	1.559	0.548	1.198	23.953	23.953	1.844	0.905	6.053
TOTAL	10.0	4.9	7.3			11.4	5.6	39.1

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	4.260	0.693	47.933	13.850	1.066	0.498	6.517
1969	0.292	4.260	0.693	48.225	18.402	1.417	0.662	7.323
1970	0.293	4.260	1.148	48.518	22.956	1.768	0.826	8.295
1971	0.295	4.260	1.376	48.813	27.511	2.118	0.989	9.039
1972	0.297	4.260	1.603	49.110	32.068	2.469	1.153	9.783
1973	0.299	4.260	1.831	49.408	36.627	2.820	1.317	10.528
1974	0.301	4.260	2.059	49.709	41.188	3.172	1.481	11.273
1975	0.302	4.260	2.288	50.011	45.751	3.523	1.646	12.019
1976	0.304	4.260	2.516	50.315	50.315	3.874	1.810	12.764
TOTAL	2.4	38.3	14.2			22.2	10.4	87.5

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	4.545	0.707	50.497	14.135	1.088	0.516	6.856
1969	0.307	4.545	0.707	50.804	18.988	1.462	0.693	7.714
1970	0.309	4.545	1.192	51.113	23.842	1.836	0.870	8.752
1971	0.311	4.545	1.435	51.424	28.698	2.210	1.047	9.548
1972	0.313	4.545	1.678	51.737	33.556	2.584	1.224	10.344
1973	0.315	4.545	1.921	52.051	38.416	2.958	1.401	11.140
1974	0.317	4.545	2.164	52.368	43.278	3.332	1.579	11.937
1975	0.319	4.545	2.407	52.686	48.141	3.707	1.756	12.734
1976	0.320	4.545	2.650	53.007	53.007	4.082	1.934	13.531
TOTAL	2.5	40.9	14.9			23.3	11.0	92.6

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	3.513	0.655	41.204	13.103	1.009	0.453	5.630
1969	0.251	3.513	0.655	41.455	16.866	1.299	0.583	6.300
1970	0.252	3.513	1.032	41.707	20.631	1.589	0.713	7.098
1971	0.254	3.513	1.220	41.960	24.397	1.879	0.843	7.708
1972	0.255	3.513	1.408	42.216	28.165	2.169	0.973	8.318
1973	0.257	3.513	1.597	42.472	31.934	2.459	1.104	8.929
1974	0.258	3.513	1.785	42.731	35.705	2.749	1.234	9.540
1975	0.260	3.513	1.974	42.991	39.478	3.040	1.364	10.151
1976	0.261	3.513	2.163	43.252	43.252	3.330	1.495	10.762
TOTAL	2.0	31.6	12.5			19.5	8.8	74.4

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	3.457	0.655	40.747	13.092	1.008	0.730	5.850
1969	2.775	3.457	0.655	43.522	19.324	1.488	1.077	9.452
1970	2.964	3.457	1.287	46.487	25.745	1.982	1.436	11.126
1971	3.166	3.457	1.618	49.653	32.368	2.492	1.805	12.539
1972	3.382	3.457	1.960	53.035	39.207	3.019	2.186	14.004
1973	3.612	3.457	2.314	56.647	46.276	3.563	2.580	15.526
1974	3.858	3.457	2.680	60.505	53.591	4.127	2.988	17.109
1975	4.121	3.457	3.058	64.626	61.169	4.710	3.411	18.757
1976	4.402	3.457	3.451	69.028	69.028	5.315	3.849	20.474
TOTAL	28.3	31.1	17.7			27.7	20.1	124.8

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	3.959	0.680	45.269	13.594	1.047	0.782	6.468
1969	3.083	3.959	0.680	48.352	20.637	1.589	1.188	10.499
1970	3.293	3.959	1.394	51.646	27.890	2.147	1.605	12.399
1971	3.518	3.959	1.768	55.163	35.366	2.723	2.035	14.004
1972	3.757	3.959	2.154	58.920	43.083	3.317	2.479	15.667
1973	4.013	3.959	2.553	62.933	51.055	3.931	2.938	17.394
1974	4.286	3.959	2.965	67.220	59.301	4.566	3.412	19.189
1975	4.578	3.959	3.392	71.798	67.839	5.224	3.904	21.057
1976	4.890	3.959	3.834	76.688	76.688	5.905	4.413	23.002
TOTAL	31.4	35.6	19.4			30.4	22.8	139.7

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	2.806	0.622	34.889	12.441	0.958	0.662	5.048
1969	2.376	2.806	0.622	37.265	17.623	1.357	0.938	8.099
1970	2.538	2.806	1.148	39.803	22.967	1.768	1.222	9.483
1971	2.711	2.806	1.424	42.514	28.484	2.193	1.516	10.651
1972	2.896	2.806	1.709	45.410	34.186	2.632	1.820	11.863
1973	3.093	2.806	2.004	48.503	40.085	3.087	2.134	13.123
1974	3.304	2.806	2.310	51.807	46.195	3.557	2.459	14.435
1975	3.529	2.806	2.626	55.335	52.529	4.045	2.796	15.802
1976	3.769	2.806	2.955	59.104	59.104	4.551	3.146	17.227
TOTAL	24.2	25.3	15.4			24.1	16.7	105.7

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	7.213	0.842	74.549	16.847	1.297	0.805	10.157
1969	5.078	7.213	0.842	79.627	29.137	2.244	1.392	16.768
1970	5.423	7.213	2.089	85.050	41.773	3.217	1.996	19.937
1971	5.793	7.213	2.739	90.843	54.779	4.218	2.617	22.580
1972	6.187	7.213	3.409	97.030	68.179	5.250	3.258	25.316
1973	6.609	7.213	4.100	103.639	82.000	6.314	3.918	28.154
1974	7.059	7.213	4.814	110.697	96.272	7.413	4.600	31.098
1975	7.540	7.213	5.551	118.237	111.024	8.549	5.305	34.157
1976	8.053	7.213	6.315	126.290	126.290	9.724	6.034	37.339
TOTAL	51.7	64.9	30.7			48.2	29.9	225.5

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	7.961	0.880	81.279	17.595	1.355	0.865	11.060
1969	5.536	7.961	0.880	86.815	31.091	2.394	1.528	18.298
1970	5.913	7.961	2.248	92.728	44.965	3.462	2.210	21.794
1971	6.316	7.961	2.962	99.044	59.241	4.562	2.911	24.711
1972	6.746	7.961	3.697	105.789	73.947	5.694	3.634	27.731
1973	7.205	7.961	4.456	112.995	89.113	6.862	4.379	30.862
1974	7.696	7.961	5.238	120.691	104.770	8.067	5.148	34.111
1975	8.220	7.961	6.048	128.911	120.951	9.313	5.943	37.485
1976	8.780	7.961	6.885	137.691	137.691	10.602	6.766	40.994
TOTAL	56.4	71.6	33.3			52.3	33.4	247.0

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	6.265	0.795	66.022	15.899	1.224	0.742	9.027
1969	4.497	6.265	0.795	70.519	26.661	2.053	1.244	14.854
1970	4.803	6.265	1.886	75.322	37.730	2.905	1.761	17.621
1971	5.130	6.265	2.456	80.452	49.125	3.783	2.292	19.927
1972	5.480	6.265	3.044	85.932	60.870	4.687	2.841	22.316
1973	5.853	6.265	3.649	91.784	72.988	5.620	3.406	24.794
1974	6.251	6.265	4.275	98.036	85.505	6.584	3.990	27.366
1975	6.677	6.265	4.922	104.713	98.448	7.580	4.594	30.040
1976	7.132	6.265	5.592	111.845	111.845	8.612	5.219	32.821
TOTAL	45.8	56.4	27.4			43.0	26.1	198.8

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	11.005	1.386	115.771	27.729	2.135	1.272	15.799
1969	-2.253	11.005	1.386	113.518	36.481	2.809	1.674	14.622
1970	-2.209	11.005	2.264	111.309	45.277	3.486	2.077	16.624
1971	-2.166	11.005	2.706	109.142	54.116	4.167	2.483	18.195
1972	-2.124	11.005	3.150	107.018	62.997	4.851	2.891	19.772
1973	-2.083	11.005	3.596	104.935	71.920	5.538	3.300	21.356
1974	-2.042	11.005	4.044	102.893	80.883	6.228	3.711	22.946
1975	-2.003	11.005	4.494	100.891	89.885	6.921	4.124	24.542
1976	-1.964	11.005	4.946	98.927	98.927	7.617	4.539	26.145
TOTAL	-16.8	99.0	28.0			43.8	26.1	180.0

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	18.818	1.777	186.083	35.542	2.737	1.919	25.250
1969	-3.622	18.818	1.777	182.461	50.738	3.907	2.739	23.619
1970	-3.551	18.818	3.300	178.910	66.004	5.082	3.563	27.212
1971	-3.482	18.818	4.067	175.428	81.340	6.263	4.391	30.057
1972	-3.414	18.818	4.837	172.014	96.744	7.449	5.222	32.912
1973	-3.348	18.818	5.611	168.667	112.214	8.640	6.057	35.778
1974	-3.283	18.818	6.387	165.384	127.749	9.837	6.896	38.655
1975	-3.219	18.818	7.167	162.165	143.348	11.038	7.738	41.542
1976	-3.156	18.818	7.950	159.009	159.009	12.244	8.584	44.439
TOTAL	-27.1	169.4	42.9			67.2	47.1	299.5

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	11.005	1.386	115.771	27.729	2.135	1.272	15.799
1969	-2.253	11.005	1.386	113.518	36.481	2.809	1.674	14.622
1970	-2.209	11.005	2.264	111.309	45.277	3.486	2.077	16.624
1971	-2.166	11.005	2.706	109.142	54.116	4.167	2.483	18.195
1972	-2.124	11.005	3.150	107.018	62.997	4.851	2.891	19.772
1973	-2.083	11.005	3.596	104.935	71.920	5.538	3.300	21.356
1974	-2.042	11.005	4.044	102.893	80.883	6.228	3.711	22.946
1975	-2.003	11.005	4.494	100.891	89.885	6.921	4.124	24.542
1976	-1.964	11.005	4.946	98.927	98.927	7.617	4.539	26.145
TOTAL	-16.8	99.0	28.0			43.8	26.1	180.0

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	49.527	4.578	487.782	91.567	7.051	6.028	67.183
1969	-0.195	49.527	4.578	487.587	140.899	10.849	9.275	74.034
1970	-0.195	49.527	9.512	487.392	190.231	14.648	12.522	86.013
1971	-0.195	49.527	11.978	487.197	239.562	18.446	15.770	95.526
1972	-0.195	49.527	14.445	487.002	288.894	22.245	19.017	105.039
1973	-0.195	49.527	16.911	486.807	338.227	26.043	22.264	114.551
1974	-0.195	49.527	19.378	486.612	387.559	29.842	25.512	124.064
1975	-0.195	49.527	21.845	486.418	436.891	33.641	28.759	133.576
1976	-0.195	49.527	24.311	486.223	486.223	37.439	32.006	143.089
TOTAL	-1.6	445.7	127.5			200.2	171.2	943.1

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	72.245	5.714	692.243	114.285	8.800	7.579	94.338
1969	-0.277	72.245	5.714	691.966	186.253	14.341	12.352	104.376
1970	-0.277	72.245	12.911	691.689	258.221	19.883	17.125	121.887
1971	-0.277	72.245	16.509	691.413	330.189	25.425	21.898	135.800
1972	-0.277	72.245	20.108	691.136	402.157	30.966	26.671	149.713
1973	-0.276	72.245	23.706	690.860	474.125	36.508	31.444	163.626
1974	-0.276	72.245	27.305	690.583	546.094	42.049	36.216	177.539
1975	-0.276	72.245	30.903	690.307	618.062	47.591	40.989	191.452
1976	-0.276	72.245	34.502	690.031	690.031	53.132	45.762	205.365
TOTAL	-2.2	650.2	177.4			278.7	240.0	1344.1

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	23.509	3.277	253.625	65.549	5.047	4.264	36.098
1969	-0.101	23.509	3.277	253.524	88.957	6.850	5.787	39.322
1970	-0.101	23.509	5.618	253.422	112.365	8.652	7.310	44.988
1971	-0.101	23.509	6.789	253.321	135.774	10.455	8.832	49.484
1972	-0.101	23.509	7.959	253.219	159.182	12.257	10.355	53.979
1973	-0.101	23.509	9.129	253.118	182.590	14.059	11.878	58.475
1974	-0.101	23.509	10.300	253.017	205.998	15.862	13.401	62.971
1975	-0.101	23.509	11.470	252.916	229.406	17.664	14.924	67.466
1976	-0.101	23.509	12.641	252.815	252.815	19.467	16.446	71.962
TOTAL	-0.8	211.6	70.5			110.3	93.2	484.7

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	28.982	10.651	444.865	213.011	16.402	16.222	72.257
1969	3.851	28.982	10.651	448.716	245.843	18.930	18.723	81.136
1970	3.884	28.982	13.935	452.600	278.709	21.461	21.226	89.488
1971	3.918	28.982	15.580	456.518	311.609	23.994	23.731	96.205
1972	3.952	28.982	17.227	460.469	344.542	26.530	26.240	102.930
1973	3.986	28.982	18.875	464.455	377.510	29.068	28.750	109.662
1974	4.020	28.982	20.526	468.475	410.512	31.609	31.264	116.401
1975	4.055	28.982	22.177	472.530	443.549	34.153	33.780	123.147
1976	4.090	28.982	23.831	476.621	476.621	36.700	36.298	129.901
TOTAL	31.8	260.8	153.5			238.8	236.2	921.1

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	35.368	10.970	502.338	219.397	16.894	17.481	80.712
1969	4.348	35.368	10.970	506.686	259.113	19.952	20.646	91.283
1970	4.386	35.368	14.943	511.072	298.866	23.013	23.813	101.523
1971	4.424	35.368	16.933	515.496	338.658	26.077	26.984	109.785
1972	4.462	35.368	18.924	519.958	378.487	29.144	30.158	118.055
1973	4.501	35.368	20.918	524.459	418.356	32.213	33.334	126.334
1974	4.540	35.368	22.913	528.999	458.263	35.286	36.514	134.621
1975	4.579	35.368	24.910	533.578	498.210	38.362	39.697	142.916
1976	4.619	35.368	26.910	538.196	538.196	41.441	42.883	151.220
TOTAL	35.9	318.3	168.4			262.4	271.5	1056.5

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	9.938	9.698	273.468	193.967	14.935	12.935	47.507
1969	2.367	9.938	9.698	275.835	206.271	15.883	13.756	51.642
1970	2.388	9.938	10.930	278.223	218.597	16.832	14.578	54.665
1971	2.408	9.938	11.547	280.631	230.943	17.783	15.401	57.077
1972	2.429	9.938	12.165	283.060	243.310	18.735	16.226	59.493
1973	2.450	9.938	12.785	285.510	255.697	19.689	17.052	61.913
1974	2.471	9.938	13.405	287.982	268.106	20.644	17.879	64.338
1975	2.493	9.938	14.027	290.475	280.537	21.601	18.708	66.767
1976	2.514	9.938	14.649	292.989	292.989	22.560	19.539	69.200
TOTAL	19.5	89.4	108.9			168.7	146.1	532.6

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	10.535	7.842	241.115	156.839	12.077	11.263	41.716
1969	11.283	10.535	7.842	252.398	178.656	13.757	12.830	56.246
1970	11.811	10.535	10.050	264.209	201.002	15.477	14.434	62.307
1971	12.364	10.535	11.195	276.573	223.901	17.240	16.079	67.413
1972	12.943	10.535	12.369	289.516	247.378	19.048	17.765	72.659
1973	13.548	10.535	13.573	303.064	271.460	20.902	19.494	78.052
1974	14.182	10.535	14.809	317.246	296.177	22.806	21.269	83.600
1975	14.846	10.535	16.078	332.092	321.558	24.760	23.092	89.310
1976	15.541	10.535	17.382	347.633	347.633	26.768	24.964	95.189
TOTAL	106.5	94.8	111.1			172.8	161.2	646.5

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	15.597	8.095	286.676	161.901	12.466	12.450	48.608
1969	13.415	15.597	8.095	300.091	190.913	14.700	14.681	66.488
1970	14.043	15.597	11.028	314.134	220.553	16.983	16.960	74.610
1971	14.700	15.597	12.543	328.835	250.850	19.315	19.290	81.445
1972	15.388	15.597	14.092	344.223	281.835	21.701	21.673	88.451
1973	16.108	15.597	15.677	360.331	313.540	24.143	24.111	95.636
1974	16.862	15.597	17.300	377.193	345.999	26.642	26.607	103.008
1975	17.651	15.597	18.962	394.844	379.247	29.202	29.164	110.576
1976	18.477	15.597	20.666	413.321	413.321	31.826	31.784	118.350
TOTAL	126.6	140.4	126.5			197.0	196.7	787.2

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.193	7.325	148.043	146.497	11.280	9.174	27.973
1969	6.928	0.193	7.325	154.971	153.618	11.829	9.620	35.895
1970	7.252	0.193	8.053	162.223	161.064	12.402	10.086	37.987
1971	7.591	0.193	8.442	169.814	168.848	13.001	10.574	39.802
1972	7.947	0.193	8.849	177.761	176.988	13.628	11.084	41.701
1973	8.318	0.193	9.275	186.079	185.500	14.283	11.617	43.687
1974	8.708	0.193	9.720	194.787	194.401	14.969	12.174	45.764
1975	9.115	0.193	10.185	203.902	203.709	15.686	12.757	47.937
1976	9.542	0.193	10.672	213.444	213.444	16.435	13.367	50.209
TOTAL	65.4	1.7	79.8			123.5	100.5	371

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.854	0.260	20.027	5.193	0.400	0.378	2.892
1969	0.901	1.854	0.260	20.928	7.949	0.612	0.579	4.206
1970	0.942	1.854	0.537	21.870	10.745	0.827	0.782	4.943
1971	0.984	1.854	0.679	22.854	13.583	1.046	0.989	5.552
1972	1.028	1.854	0.823	23.883	16.466	1.268	1.199	6.173
1973	1.075	1.854	0.970	24.957	19.395	1.493	1.412	6.804
1974	1.123	1.854	1.119	26.080	22.372	1.723	1.629	7.447
1975	1.174	1.854	1.270	27.254	25.400	1.956	1.849	8.103
1976	1.226	1.854	1.424	28.480	28.480	2.193	2.073	8.771
TOTAL	8.5	16.7	7.3			11.5	10.9	54.9

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	2.009	0.267	21.421	5.348	0.412	0.401	3.090
1969	0.964	2.009	0.267	22.385	8.321	0.641	0.624	4.505
1970	1.007	2.009	0.567	23.392	11.338	0.873	0.851	5.307
1971	1.053	2.009	0.720	24.445	14.399	1.109	1.080	5.971
1972	1.100	2.009	0.875	25.545	17.508	1.348	1.313	6.646
1973	1.150	2.009	1.033	26.694	20.667	1.591	1.550	7.334
1974	1.201	2.009	1.194	27.896	23.877	1.839	1.791	8.034
1975	1.255	2.009	1.357	29.151	27.142	2.090	2.036	8.748
1976	1.312	2.009	1.523	30.463	30.463	2.346	2.285	9.475
TOTAL	9.0	18.1	7.8			12.2	11.9	59.1

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.151	0.224	13.695	4.490	0.346	0.280	2.001
1969	0.616	1.151	0.224	14.311	6.257	0.482	0.390	2.863
1970	0.644	1.151	0.403	14.955	8.051	0.620	0.502	3.319
1971	0.673	1.151	0.494	15.628	9.875	0.760	0.616	3.694
1972	0.703	1.151	0.586	16.332	11.729	0.903	0.731	4.075
1973	0.735	1.151	0.681	17.066	13.614	1.048	0.849	4.464
1974	0.768	1.151	0.777	17.834	15.533	1.196	0.969	4.860
1975	0.803	1.151	0.874	18.637	17.486	1.346	1.090	5.264
1976	0.839	1.151	0.974	19.476	19.476	1.500	1.214	5.677
TOTAL	5.8	10.4	5.2			8.2	6.6	36.2

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.947	0.097	17.519	1.947	0.150	0.098	2.292
1969	0.808	1.947	0.097	18.327	4.702	0.362	0.237	3.451
1970	0.846	1.947	0.375	19.173	7.494	0.577	0.377	4.121
1971	0.885	1.947	0.516	20.058	10.325	0.795	0.520	4.662
1972	0.926	1.947	0.660	20.984	13.197	1.016	0.664	5.213
1973	0.968	1.947	0.806	21.952	16.112	1.241	0.811	5.772
1974	1.013	1.947	0.954	22.965	19.072	1.469	0.960	6.342
1975	1.060	1.947	1.104	24.025	22.078	1.700	1.112	6.922
1976	1.109	1.947	1.257	25.133	25.133	1.935	1.265	7.512
TOTAL	7.6	17.5	5.9			9.2	6.0	46.3

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	2.048	0.102	18.431	2.048	0.158	0.105	2.413
1969	0.851	2.048	0.102	19.282	4.946	0.381	0.255	3.636
1970	0.890	2.048	0.394	20.171	7.884	0.607	0.406	4.345
1971	0.931	2.048	0.543	21.102	10.863	0.836	0.559	4.918
1972	0.974	2.048	0.694	22.076	13.884	1.069	0.715	5.500
1973	1.019	2.048	0.848	23.095	16.951	1.305	0.873	6.092
1974	1.066	2.048	1.003	24.160	20.065	1.545	1.033	6.695
1975	1.115	2.048	1.161	25.275	23.227	1.789	1.196	7.309
1976	1.166	2.048	1.322	26.442	26.442	2.036	1.361	7.934
TOTAL	8.0	18.4	6.2			9.7	6.5	48.8

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.445	0.072	13.003	1.445	0.111	0.067	1.695
1969	0.600	1.445	0.072	13.603	3.490	0.269	0.161	2.547
1970	0.628	1.445	0.278	14.231	5.562	0.428	0.257	3.036
1971	0.657	1.445	0.383	14.887	7.664	0.590	0.354	3.428
1972	0.687	1.445	0.490	15.574	9.795	0.754	0.452	3.828
1973	0.719	1.445	0.598	16.293	11.959	0.921	0.552	4.234
1974	0.752	1.445	0.708	17.045	14.155	1.090	0.653	4.648
1975	0.787	1.445	0.819	17.832	16.387	1.262	0.756	5.069
1976	0.823	1.445	0.933	18.654	18.654	1.436	0.861	5.498
TOTAL	5.7	13.0	4.4			6.9	4.1	34.0

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	2.235	0.324	24.366	6.482	0.499	0.341	3.399
1969	-1.101	2.235	0.324	23.265	7.617	0.586	0.400	2.445
1970	-1.051	2.235	0.440	22.214	8.801	0.678	0.462	2.764
1971	-1.004	2.235	0.502	21.210	10.033	0.773	0.527	3.033
1972	-0.958	2.235	0.565	20.251	11.309	0.871	0.594	3.307
1973	-0.915	2.235	0.631	19.336	12.630	0.972	0.663	3.588
1974	-0.874	2.235	0.700	18.462	13.991	1.077	0.735	3.874
1975	-0.834	2.235	0.770	17.628	15.393	1.185	0.809	4.165
1976	-0.797	2.235	0.842	16.831	16.831	1.296	0.884	4.461
TOTAL	-7.5	20.1	5.1			7.9	5.4	31.0

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	2.805	0.353	29.494	7.052	0.543	0.410	4.111
1969	-1.333	2.805	0.353	28.161	8.525	0.656	0.496	2.977
1970	-1.273	2.805	0.503	26.889	10.057	0.774	0.585	3.395
1971	-1.215	2.805	0.582	25.673	11.647	0.897	0.677	3.747
1972	-1.160	2.805	0.665	24.513	13.292	1.024	0.773	4.106
1973	-1.108	2.805	0.749	23.406	14.990	1.154	0.872	4.473
1974	-1.058	2.805	0.837	22.348	16.737	1.289	0.973	4.846
1975	-1.010	2.805	0.927	21.338	18.533	1.427	1.078	5.227
1976	-0.964	2.805	1.019	20.374	20.374	1.569	1.185	5.613
TOTAL	-9.1	25.2	6.0			9.3	7.0	38.5

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.186	0.272	14.919	5.433	0.418	0.240	2.116
1969	-0.674	1.186	0.272	14.245	5.944	0.458	0.263	1.504
1970	-0.644	1.186	0.324	13.601	6.486	0.499	0.287	1.652
1971	-0.615	1.186	0.353	12.986	7.058	0.543	0.312	1.779
1972	-0.587	1.186	0.383	12.400	7.656	0.590	0.338	1.909
1973	-0.560	1.186	0.414	11.839	8.282	0.638	0.366	2.043
1974	-0.535	1.186	0.447	11.304	8.933	0.688	0.395	2.180
1975	-0.511	1.186	0.480	10.793	9.608	0.740	0.424	2.319
1976	-0.488	1.186	0.515	10.306	10.306	0.794	0.455	2.462
TOTAL	-4.6	10.7	3.5			5.4	3.1	18.0

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	-0.158	0.690	12.526	13.792	1.062	2.104	3.697
1969	-0.501	-0.158	0.690	12.025	13.132	1.011	2.003	3.045
1970	-0.481	-0.158	0.625	11.543	12.493	0.962	1.906	2.853
1971	-0.462	-0.158	0.594	11.081	11.872	0.914	1.811	2.699
1972	-0.444	-0.158	0.564	10.638	11.271	0.868	1.719	2.549
1973	-0.426	-0.158	0.534	10.212	10.687	0.823	1.630	2.404
1974	-0.409	-0.158	0.506	9.803	10.120	0.779	1.544	2.262
1975	-0.392	-0.158	0.478	9.411	9.569	0.737	1.460	2.125
1976	-0.377	-0.158	0.452	9.034	9.034	0.696	1.378	1.991
TOTAL	-3.5	-1.4	5.1			7.9	15.6	23.6

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.405	0.718	17.593	14.355	1.105	2.510	4.738
1969	-0.704	0.405	0.718	16.889	14.055	1.082	2.457	3.958
1970	-0.676	0.405	0.689	16.213	13.784	1.061	2.410	3.889
1971	-0.649	0.405	0.677	15.564	13.540	1.043	2.367	3.843
1972	-0.623	0.405	0.666	14.941	13.322	1.026	2.329	3.803
1973	-0.598	0.405	0.656	14.343	13.129	1.011	2.295	3.770
1974	-0.574	0.405	0.648	13.769	12.959	0.998	2.266	3.742
1975	-0.551	0.405	0.641	13.218	12.813	0.987	2.240	3.721
1976	-0.529	0.405	0.634	12.689	12.689	0.977	2.219	3.706
TOTAL	-4.9	3.6	6.0			9.3	21.1	35.2

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	-0.930	0.651	5.576	13.020	1.003	1.550	2.273
1969	-0.223	-0.930	0.651	5.353	11.866	0.914	1.413	1.824
1970	-0.214	-0.930	0.536	5.139	10.721	0.826	1.277	1.494
1971	-0.206	-0.930	0.479	4.933	9.585	0.738	1.141	1.223
1972	-0.197	-0.930	0.423	4.735	8.457	0.651	1.007	0.953
1973	-0.190	-0.930	0.367	4.546	7.337	0.565	0.874	0.686
1974	-0.182	-0.930	0.311	4.364	6.225	0.479	0.741	0.419
1975	-0.175	-0.930	0.256	4.189	5.120	0.394	0.610	0.155
1976	-0.168	-0.930	0.201	4.022	4.022	0.310	0.479	-0.108
TOTAL	-1.6	-8.4	3.9			5.9	9.1	8.9

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 2813 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	2.831	0.154	25.728	3.079	0.237	0.382	3.604
1969	0.657	2.831	0.154	26.385	6.568	0.506	0.814	4.962
1970	0.674	2.831	0.504	27.059	10.073	0.776	1.248	6.033
1971	0.691	2.831	0.680	27.751	13.595	1.047	1.685	6.934
1972	0.709	2.831	0.857	28.460	17.135	1.319	2.123	7.840
1973	0.727	2.831	1.035	29.187	20.694	1.593	2.564	8.751
1974	0.746	2.831	1.214	29.933	24.271	1.869	3.007	9.667
1975	0.765	2.831	1.393	30.698	27.866	2.146	3.453	10.588
1976	0.784	2.831	1.574	31.482	31.482	2.424	3.901	11.515
TOTAL	5.8	25.5	7.6			11.9	19.2	69.9

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	3.367	0.181	30.552	3.615	0.278	0.488	4.315
1969	0.781	3.367	0.181	31.333	7.763	0.598	1.049	5.975
1970	0.801	3.367	0.597	32.133	11.930	0.919	1.612	7.294
1971	0.821	3.367	0.806	32.954	16.119	1.241	2.177	8.412
1972	0.842	3.367	1.016	33.796	20.328	1.565	2.746	9.537
1973	0.863	3.367	1.228	34.660	24.558	1.891	3.317	10.667
1974	0.886	3.367	1.441	35.545	28.811	2.218	3.892	11.803
1975	0.908	3.367	1.654	36.453	33.086	2.548	4.469	12.947
1976	0.931	3.367	1.869	37.385	37.385	2.879	5.050	14.096
TOTAL	6.8	30.3	9.0			14.1	24.8	85.0

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.346	0.080	12.359	1.594	0.123	0.158	1.706
1969	0.316	1.346	0.080	12.675	3.255	0.251	0.322	2.314
1970	0.324	1.346	0.246	12.999	4.925	0.379	0.487	2.782
1971	0.332	1.346	0.330	13.331	6.602	0.508	0.653	3.169
1972	0.341	1.346	0.414	13.671	8.289	0.638	0.820	3.558
1973	0.349	1.346	0.499	14.021	9.984	0.769	0.907	3.950
1974	0.358	1.346	0.584	14.379	11.688	0.900	1.156	4.344
1975	0.367	1.346	0.670	14.746	13.401	1.032	1.325	4.740
1976	0.377	1.346	0.756	15.123	15.123	1.164	1.495	5.138
TOTAL	2.8	12.1	3.7			5.8	7.4	31.7

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 2815 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	-4.989	2.785	15.775	55.691	4.288	3.107	5.190
1969	0.015	-4.989	2.785	15.790	50.717	3.905	2.829	4.545
1970	0.015	-4.989	2.287	15.806	45.743	3.522	2.552	3.387
1971	0.015	-4.989	2.038	15.821	40.769	3.139	2.274	2.478
1972	0.015	-4.989	1.790	15.837	35.795	2.756	1.997	1.569
1973	0.016	-4.989	1.541	15.852	30.821	2.373	1.719	0.660
1974	0.016	-4.989	1.292	15.868	25.847	1.990	1.442	-0.250
1975	0.016	-4.989	1.044	15.883	20.873	1.607	1.164	-1.159
1976	0.016	-4.989	0.795	15.899	15.899	1.224	0.887	-2.068
TOTAL	0.1	-44.9	16.4			24.8	18.0	14.4

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEPEST	OPERATIONS	CASH RQMTS
1968	0.0	-4.942	2.787	16.202	55.738	4.292	3.120	5.257
1969	0.016	-4.942	2.787	16.218	50.812	3.913	2.844	4.618
1970	0.016	-4.942	2.294	16.234	45.886	3.533	2.569	3.470
1971	0.016	-4.942	2.048	16.250	40.960	3.154	2.293	2.569
1972	0.016	-4.942	1.802	16.266	36.034	2.775	2.017	1.667
1973	0.016	-4.942	1.555	16.281	31.107	2.395	1.741	0.766
1974	0.016	-4.942	1.309	16.297	26.181	2.016	1.466	-0.135
1975	0.016	-4.942	1.063	16.313	21.255	1.637	1.190	-1.037
1976	0.016	-4.942	0.816	16.329	16.329	1.257	0.914	-1.938
TOTAL	[illegible]	-44.5	16.5			25.0	18.2	15.2

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	-5.429	2.763	11.820	55.251	4.254	2.861	4.449
1969	0.012	-5.429	2.763	11.832	49.834	3.837	2.580	3.763
1970	0.012	-5.429	2.221	11.843	44.416	3.420	2.300	2.523
1971	0.012	-5.429	1.950	11.855	38.999	3.003	2.019	1.555
1972	0.012	-5.429	1.679	11.866	33.582	2.586	1.739	0.586
1973	0.012	-5.429	1.408	11.878	28.165	2.169	1.458	-0.382
1974	0.012	-5.429	1.137	11.890	22.747	1.752	1.178	-1.351
1975	0.012	-5.429	0.867	11.901	17.330	1.334	0.897	-2.319
1976	0.012	-5.429	0.596	11.913	11.913	0.917	0.617	-3.287
TOTAL	0.1	-48.9	15.4			23.3	15.6	5.5

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 2816 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.634	0.374	12.552	7.483	0.576	1.062	2.646
1969	0.321	0.634	0.374	12.873	8.437	0.650	1.198	3.176
1970	0.329	0.634	0.470	13.202	9.400	0.724	1.334	3.491
1971	0.337	0.634	0.519	13.539	10.371	0.799	1.472	3.760
1972	0.346	0.634	0.568	13.885	11.350	0.874	1.611	4.032
1973	0.355	0.634	0.617	14.240	12.339	0.950	1.752	4.307
1974	0.364	0.634	0.667	14.603	13.336	1.027	1.893	4.584
1975	0.373	0.634	0.717	14.977	14.343	1.104	2.036	4.865
1976	0.383	0.634	0.768	15.359	15.359	1.183	2.181	5.147
TOTAL	2.8	5.7	5.1			7.9	14.5	36.0

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.696	0.377	13.110	7.545	0.581	1.093	2.747
1969	0.335	0.696	0.377	13.445	8.575	0.660	1.242	3.310
1970	0.344	0.696	0.481	13.788	9.614	0.740	1.393	3.653
1971	0.352	0.696	0.533	14.141	10.662	0.821	1.544	3.947
1972	0.361	0.696	0.586	14.502	11.719	0.902	1.698	4.243
1973	0.371	0.696	0.639	14.873	12.786	0.984	1.852	4.542
1974	0.380	0.696	0.693	15.253	13.861	1.067	2.008	4.844
1975	0.390	0.696	0.747	15.642	14.947	1.151	2.165	5.149
1976	0.400	0.696	0.802	16.042	16.042	1.235	2.324	5.456
TOTAL	2.9	6.3	5.2			8.1	15.3	37.9

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.024	0.344	7.065	6.873	0.529	0.791	1.688
1969	0.181	0.024	0.344	7.246	7.078	0.545	0.814	1.908
1970	0.185	0.024	0.364	7.431	7.287	0.561	0.839	1.973
1971	0.190	0.024	0.375	7.620	7.500	0.578	0.863	2.030
1972	0.195	0.024	0.386	7.815	7.719	0.594	0.888	2.087
1973	0.200	0.024	0.397	8.015	7.943	0.612	0.914	2.146
1974	0.205	0.024	0.409	8.220	8.172	0.629	0.940	2.207
1975	0.210	0.024	0.420	8.430	8.406	0.647	0.967	2.269
1976	0.215	0.024	0.432	8.645	8.645	0.666	0.995	2.332
TOTAL	1.6	0.2	3.5			5.4	8.0	18.6

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 2818 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	20.263	9.420	350.513	188.410	14.508	14.298	58.489
1969	15.904	20.263	9.420	366.417	224.577	17.292	17.043	79.922
1970	16.625	20.263	13.073	383.042	261.465	20.133	19.842	89.937
1971	17.380	20.263	14.955	400.422	299.108	23.031	22.699	98.328
1972	18.168	20.263	16.877	418.590	337.539	25.990	25.615	106.914
1973	18.993	20.263	18.840	437.583	376.794	29.013	28.594	115.703
1974	19.854	20.263	20.846	457.438	416.912	32.102	31.639	124.704
1975	20.755	20.263	22.896	478.193	457.930	35.261	34.752	133.927
1976	21.697	20.263	24.994	499.890	499.890	38.492	37.936	143.382
TOTAL	149.4	182.4	151.3			235.8	232.4	951.3

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.986	8.457	177.021	169.133	13.023	61.161	83.626
1969	8.032	0.986	8.457	185.053	178.151	13.718	64.422	95.614
1970	8.396	0.986	9.377	193.449	187.533	14.440	67.814	101.014
1971	8.777	0.986	9.865	202.227	197.297	15.192	71.345	106.165
1972	9.176	0.986	10.373	211.402	207.458	15.974	75.020	111.528
1973	9.592	0.986	10.902	220.994	218.036	16.789	78.845	117.113
1974	10.027	0.986	11.452	231.022	229.050	17.637	82.827	122.930
1975	10.482	0.986	12.026	241.504	240.518	18.520	86.974	128.988
1976	10.958	0.986	12.623	252.461	252.461	19.440	91.293	135.300
TOTAL	75.4	8.9	93.5			144.7	679.7	1002.3

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	-3.551	8.230	136.190	164.596	12.674	12.627	29.980
1969	6.179	-3.551	8.230	142.369	167.225	12.876	12.829	36.564
1970	6.460	-3.551	8.507	148.829	170.134	13.100	13.052	37.568
1971	6.753	-3.551	8.667	155.582	173.336	13.347	13.298	38.513
1972	7.059	-3.551	8.842	162.641	176.844	13.617	13.567	39.534
1973	7.380	-3.551	9.034	170.021	180.673	13.912	13.861	40.635
1974	7.714	-3.551	9.242	177.735	184.837	14.232	14.180	41.818
1975	8.064	-3.551	9.468	185.799	189.350	14.580	14.526	43.087
1976	8.430	-3.551	9.711	194.230	194.230	14.956	14.901	44.447
TOTAL	58.0	-32.0	79.9			123.3	122.8	352.1

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 2819 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	4.239	2.052	74.953	41.042	3.160	5.885	15.336
1969	2.801	4.239	2.052	77.754	48.082	3.702	6.894	19.689
1970	2.906	4.239	2.761	80.660	55.227	4.252	7.919	22.077
1971	3.015	4.239	3.124	83.675	62.481	4.811	8.959	24.147
1972	3.127	4.239	3.492	86.802	69.847	5.378	10.015	26.252
1973	3.244	4.239	3.867	90.047	77.330	5.954	11.088	28.392
1974	3.365	4.239	4.247	93.412	84.934	6.540	12.178	30.569
1975	3.491	4.239	4.633	96.904	92.665	7.135	13.287	32.785
1976	3.622	4.239	5.026	100.525	100.525	7.740	14.414	35.041
TOTAL	25.6	38.1	31.3			48.7	90.6	234.3

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	7.410	2.211	103.496	44.213	3.404	7.355	20.380
1969	3.868	7.410	2.211	107.364	55.492	4.273	9.231	26.993
1970	4.013	7.410	3.346	111.377	66.915	5.152	11.131	31.052
1971	4.163	7.410	3.924	115.540	78.488	6.044	13.056	34.597
1972	4.318	7.410	4.511	119.858	90.217	6.947	15.007	38.193
1973	4.480	7.410	5.105	124.338	102.107	7.862	16.985	41.842
1974	4.647	7.410	5.708	128.985	114.164	8.791	18.991	45.547
1975	4.821	7.410	6.320	133.806	126.395	9.732	21.025	49.308
1976	5.001	7.410	6.940	138.806	138.806	10.688	23.090	53.129
TOTAL	35.3	66.7	40.3			62.9	135.9	341.0

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.458	1.863	40.928	37.261	2.869	4.378	9.569
1969	1.530	0.458	1.863	42.458	39.249	3.022	4.612	11.485
1970	1.587	0.458	2.065	44.045	41.295	3.180	4.852	12.142
1971	1.646	0.458	2.170	45.691	43.399	3.342	5.099	12.716
1972	1.708	0.458	2.278	47.398	45.565	3.509	5.354	13.307
1973	1.772	0.458	2.390	49.170	47.795	3.680	5.616	13.916
1974	1.838	0.458	2.505	51.008	50.091	3.857	5.886	14.543
1975	1.906	0.458	2.623	52.914	52.456	4.039	6.163	15.190
1976	1.978	0.458	2.745	54.892	54.892	4.227	6.450	15.857
TOTAL	14.0	4.1	20.5			31.7	48.4	118.7

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	2.238	11.175	241.404	223.498	17.209	9.163	39.785
1969	10.981	2.238	11.175	252.385	236.717	18.227	9.705	52.326
1970	11.480	2.238	12.522	263.865	250.436	19.284	10.267	55.791
1971	12.003	2.238	13.234	275.868	264.677	20.380	10.851	58.706
1972	12.549	2.238	13.973	288.417	279.464	21.519	11.457	61.736
1973	13.120	2.238	14.741	301.536	294.822	22.701	12.087	64.887
1974	13.716	2.238	15.539	315.253	310.776	23.930	12.741	68.164
1975	14.340	2.238	16.368	329.593	327.355	25.206	13.421	71.573
1976	14.993	2.238	17.229	344.585	344.585	26.533	14.127	75.120
TOTAL	103.2	20.1	126.0			195.0	103.8	548.1

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	11.712	11.649	326.672	232.972	17.939	11.178	52.478
1969	14.860	11.712	11.649	341.532	259.545	19.985	12.453	70.659
1970	15.536	11.712	14.340	357.067	286.793	22.083	13.761	77.431
1971	16.242	11.712	15.737	373.310	314.747	24.236	15.102	83.029
1972	16.981	11.712	17.172	390.291	343.441	26.445	16.479	88.789
1973	17.754	11.712	18.645	408.044	372.907	28.714	17.892	94.718
1974	18.561	11.712	20.159	426.605	403.180	31.045	19.345	100.822
1975	19.405	11.712	21.715	446.011	434.298	33.441	20.838	107.112
1976	20.288	11.712	23.315	466.299	466.299	35.905	22.373	113.594
TOTAL	139.6	105.4	154.4			239.8	149.4	788.6

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	-7.572	10.684	153.111	213.688	16.454	7.764	27.330
1969	6.965	-7.572	10.684	160.076	213.080	16.407	7.742	34.226
1970	7.282	-7.572	10.639	167.357	212.790	16.385	7.731	34.465
1971	7.613	-7.572	10.642	174.970	212.831	16.388	7.733	34.803
1972	7.959	-7.572	10.661	182.929	213.217	16.418	7.747	35.212
1973	8.321	-7.572	10.698	191.250	213.966	16.475	7.774	35.697
1974	8.700	-7.572	10.755	199.950	215.094	16.562	7.815	36.259
1975	9.095	-7.572	10.831	209.045	216.617	16.680	7.870	36.904
1976	9.509	-7.572	10.928	218.554	218.554	16.829	7.941	37.634
TOTAL	65.4	-68.1	96.5			148.6	70.1	312.5

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 283 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	2.278	0.535	28.925	10.705	0.824	0.514	4.151
1969	0.079	2.278	0.535	29.004	13.061	1.006	0.628	4.525
1970	0.079	2.278	0.771	29.083	15.417	1.187	0.741	5.055
1971	0.079	2.278	0.889	29.162	17.774	1.369	0.854	5.468
1972	0.079	2.278	1.007	29.241	20.131	1.550	0.967	5.881
1973	0.080	2.278	1.124	29.321	22.488	1.732	1.081	6.294
1974	0.080	2.278	1.242	29.401	24.846	1.913	1.194	6.707
1975	0.080	2.278	1.360	29.481	27.203	2.095	1.307	7.120
1976	0.080	2.278	1.478	29.561	29.561	2.276	1.421	7.533
TOTAL	0.6	20.5	8.9			14.0	8.7	52.7

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	2.531	0.548	31.208	10.958	0.844	0.537	4.459
1969	0.085	2.531	0.548	31.293	13.574	1.045	0.665	4.874
1970	0.085	2.531	0.810	31.378	16.191	1.247	0.793	5.465
1971	0.085	2.531	0.940	31.464	18.807	1.448	0.921	5.926
1972	0.086	2.531	1.071	31.549	21.424	1.650	1.049	6.387
1973	0.086	2.531	1.202	31.635	24.041	1.851	1.177	6.847
1974	0.086	2.531	1.333	31.721	26.659	2.053	1.305	7.308
1975	0.086	2.531	1.464	31.808	29.276	2.254	1.433	7.769
1976	0.087	2.531	1.595	31.894	31.894	2.456	1.562	8.230
TOTAL	0.7	22.8	9.5			14.8	9.4	57.3

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.227	0.483	19.472	9.654	0.743	0.418	2.871
1969	0.053	1.227	0.483	19.525	10.934	0.842	0.473	3.078
1970	0.053	1.227	0.611	19.578	12.215	0.941	0.529	3.360
1971	0.053	1.227	0.675	19.631	13.495	1.039	0.584	3.579
1972	0.053	1.227	0.739	19.685	14.776	1.138	0.640	3.797
1973	0.054	1.227	0.803	19.738	16.057	1.236	0.695	4.015
1974	0.054	1.227	0.867	19.792	17.338	1.335	0.751	4.233
1975	0.054	1.227	0.931	19.846	18.619	1.434	0.806	4.452
1976	0.054	1.227	0.995	19.900	19.900	1.532	0.862	4.670
TOTAL	0.4	11.0	6.6			10.2	5.8	34.1

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 284 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.281	0.039	3.017	0.772	0.059	0.112	0.491
1969	0.021	0.281	0.039	3.038	1.073	0.083	0.156	0.579
1970	0.021	0.281	0.069	3.059	1.375	0.106	0.200	0.676
1971	0.021	0.281	0.084	3.081	1.677	0.129	0.244	0.759
1972	0.022	0.281	0.099	3.102	1.980	0.152	0.287	0.841
1973	0.022	0.281	0.114	3.124	2.282	0.176	0.331	0.923
1974	0.022	0.281	0.129	3.146	2.585	0.199	0.375	1.006
1975	0.022	0.281	0.144	3.168	2.887	0.222	0.419	1.089
1976	0.022	0.281	0.160	3.190	3.190	0.246	0.463	1.171
TOTAL	0.2	2.5	0.9			1.4	2.6	7.5

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.298	0.039	3.177	0.789	0.061	0.119	0.517
1969	0.022	0.298	0.039	3.199	1.110	0.085	0.167	0.613
1970	0.022	0.298	0.072	3.222	1.431	0.110	0.215	0.718
1971	0.023	0.298	0.088	3.244	1.752	0.135	0.264	0.807
1972	0.023	0.298	0.104	3.267	2.073	0.160	0.312	0.896
1973	0.023	0.298	0.120	3.290	2.394	0.184	0.360	0.986
1974	0.023	0.298	0.136	3.313	2.716	0.209	0.409	1.075
1975	0.023	0.298	0.152	3.336	3.037	0.234	0.457	1.164
1976	0.023	0.298	0.168	3.359	3.359	0.259	0.505	1.254
TOTAL	0.2	2.7	0.9			1.4	2.8	8.0

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.157	0.032	1.901	0.648	0.050	0.081	0.320
1969	0.013	0.157	0.032	1.914	0.818	0.063	0.102	0.367
1970	0.013	0.157	0.049	1.928	0.988	0.076	0.123	0.419
1971	0.013	0.157	0.058	1.941	1.158	0.089	0.144	0.462
1972	0.014	0.157	0.066	1.955	1.328	0.102	0.166	0.504
1973	0.014	0.157	0.075	1.968	1.498	0.115	0.187	0.547
1974	0.014	0.157	0.083	1.982	1.669	0.129	0.208	0.590
1975	0.014	0.157	0.092	1.996	1.839	0.142	0.229	0.633
1976	0.014	0.157	0.101	2.010	2.010	0.155	0.251	0.677
TOTAL	0.1	1.4	0.6			0.9	1.5	4.5

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.024	0.064	9.479	1.283	0.099	0.138	1.326
1969	-0.156	1.024	0.064	9.323	2.152	0.166	0.232	1.330
1970	-0.153	1.024	0.151	9.170	3.023	0.233	0.326	1.581
1971	-0.151	1.024	0.195	9.020	3.897	0.300	0.420	1.789
1972	-0.148	1.024	0.239	8.871	4.774	0.368	0.514	1.997
1973	-0.146	1.024	0.283	8.726	5.652	0.435	0.609	2.205
1974	-0.143	1.024	0.327	8.582	6.533	0.503	0.704	2.415
1975	-0.141	1.024	0.371	8.441	7.417	0.571	0.799	2.624
1976	-0.139	1.024	0.415	8.303	8.303	0.639	0.894	2.835
TOTAL	-1.2	9.2	2.1			3.3	4.6	18.1

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.238	0.075	11.399	1.497	0.115	0.173	1.601
1969	-0.187	1.238	0.075	11.212	2.547	0.196	0.295	1.617
1970	-0.184	1.238	0.180	11.028	3.601	0.277	0.417	1.928
1971	-0.181	1.238	0.233	10.846	4.658	0.359	0.540	2.188
1972	-0.178	1.238	0.286	10.668	5.717	0.440	0.663	2.448
1973	-0.175	1.238	0.339	10.493	6.780	0.522	0.786	2.709
1974	-0.172	1.238	0.392	10.321	7.845	0.604	0.909	2.971
1975	-0.170	1.238	0.446	10.151	8.913	0.686	1.033	3.233
1976	-0.167	1.238	0.499	9.984	9.984	0.769	1.157	3.496
TOTAL	-1.4	11.1	2.5			4.0	6.0	22.2

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.677	0.047	6.348	0.936	0.072	0.092	0.887
1969	-0.104	0.677	0.047	6.244	1.508	0.116	0.148	0.883
1970	-0.103	0.677	0.104	6.141	2.082	0.160	0.204	1.042
1971	-0.101	0.677	0.133	6.040	2.658	0.205	0.260	1.174
1972	-0.099	0.677	0.162	5.941	3.235	0.249	0.317	1.305
1973	-0.098	0.677	0.191	5.843	3.814	0.294	0.374	1.437
1974	-0.096	0.677	0.220	5.748	4.394	0.338	0.431	1.569
1975	-0.094	0.677	0.249	5.653	4.977	0.383	0.488	1.702
1976	-0.093	0.677	0.278	5.560	5.560	0.428	0.545	1.835
TOTAL	-0.8	6.1	1.4			2.2	2.9	11.8

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.364	0.157	6.062	3.146	0.242	0.207	0.971
1969	-0.353	0.364	0.157	5.709	3.158	0.243	0.207	0.619
1970	-0.332	0.364	0.160	5.377	3.190	0.246	0.209	0.647
1971	-0.313	0.364	0.162	5.064	3.242	0.250	0.213	0.676
1972	-0.295	0.364	0.166	4.769	3.311	0.255	0.217	0.708
1973	-0.278	0.364	0.170	4.491	3.398	0.262	0.223	0.741
1974	-0.261	0.364	0.175	4.230	3.501	0.270	0.230	0.777
1975	-0.246	0.364	0.181	3.984	3.619	0.279	0.238	0.815
1976	-0.232	0.364	0.188	3.752	3.752	0.289	0.246	0.855
TOTAL	-2.3	3.3	1.5			2.3	2.0	6.8

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.587	0.168	8.068	3.369	0.259	0.259	1.274
1969	-0.470	0.587	0.168	7.598	3.487	0.268	0.268	0.823
1970	-0.442	0.587	0.182	7.156	3.632	0.280	0.279	0.885
1971	-0.417	0.587	0.190	6.739	3.803	0.293	0.292	0.946
1972	-0.392	0.587	0.200	6.347	3.998	0.308	0.307	1.010
1973	-0.369	0.587	0.211	5.978	4.216	0.325	0.324	1.077
1974	-0.348	0.587	0.223	5.630	4.455	0.343	0.342	1.147
1975	-0.328	0.587	0.236	5.302	4.715	0.363	0.362	1.221
1976	-0.309	0.587	0.250	4.993	4.993	0.384	0.384	1.297
TOTAL	-3.1	5.3	1.8			2.8	2.8	9.7

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.034	0.141	3.085	2.816	0.217	0.164	0.556
1969	-0.180	0.034	0.141	2.905	2.670	0.206	0.156	0.356
1970	-0.169	0.034	0.127	2.736	2.534	0.195	0.148	0.334
1971	-0.159	0.034	0.120	2.577	2.409	0.185	0.141	0.321
1972	-0.150	0.034	0.115	2.427	2.292	0.177	0.134	0.309
1973	-0.141	0.034	0.109	2.286	2.185	0.168	0.127	0.297
1974	-0.133	0.034	0.104	2.153	2.085	0.161	0.122	0.287
1975	-0.125	0.034	0.100	2.027	1.994	0.154	0.116	0.278
1976	-0.118	0.034	0.095	1.909	1.909	0.147	0.111	0.270
TOTAL	-1.2	0.3	1.1			1.6	1.2	3.0

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.732	0.598	25.822	11.964	0.921	2.291	5.542
1969	0.734	1.732	0.598	26.556	14.431	1.111	2.763	6.939
1970	0.755	1.732	0.846	27.312	16.918	1.303	3.239	7.875
1971	0.777	1.732	0.971	28.089	19.427	1.496	3.720	8.696
1972	0.799	1.732	1.098	28.887	21.959	1.691	4.204	9.524
1973	0.822	1.732	1.226	29.709	24.512	1.887	4.693	10.360
1974	0.845	1.732	1.354	30.554	27.090	2.086	5.187	11.204
1975	0.869	1.732	1.485	31.423	29.691	2.286	5.685	12.057
1976	0.894	1.732	1.616	32.317	32.317	2.488	6.188	12.918
TOTAL	6.5	15.6	9.8			15.3	38.0	85.1

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	2.634	0.643	33.939	12.866	0.991	2.877	7.145
1969	0.965	2.634	0.643	34.904	16.466	1.268	3.681	9.192
1970	0.993	2.634	1.005	35.897	20.092	1.547	4.492	10.671
1971	1.021	2.634	1.187	36.918	23.747	1.829	5.309	11.980
1972	1.050	2.634	1.372	37.968	27.432	2.112	6.133	13.301
1973	1.080	2.634	1.557	39.048	31.146	2.398	6.963	14.633
1974	1.111	2.634	1.745	40.159	34.890	2.687	7.801	15.976
1975	1.142	2.634	1.933	41.301	38.667	2.977	8.645	17.332
1976	1.175	2.634	2.124	42.475	42.475	3.271	9.497	18.700
TOTAL	8.5	23.7	12.2			19.1	55.4	118.9

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.840	0.554	17.796	11.072	0.853	1.783	4.029
1969	0.506	0.840	0.554	18.302	12.419	0.956	1.999	4.856
1970	0.521	0.840	0.689	18.823	13.780	1.061	2.218	5.330
1971	0.535	0.840	0.758	19.358	15.156	1.167	2.440	5.741
1972	0.551	0.840	0.827	19.909	16.547	1.274	2.664	6.156
1973	0.566	0.840	0.898	20.475	17.954	1.382	2.890	6.577
1974	0.582	0.840	0.969	21.057	19.376	1.492	3.119	7.003
1975	0.599	0.840	1.041	21.656	20.816	1.603	3.351	7.434
1976	0.616	0.840	1.114	22.272	22.272	1.715	3.586	7.871
TOTAL	4.5	7.6	7.4			11.5	24.1	55.0

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	5.258	0.944	60.952	18.887	1.454	2.542	10.199
1969	14.774	5.258	0.944	75.726	38.919	2.997	5.238	29.211
1970	18.355	5.258	3.127	94.081	62.532	4.815	8.417	39.971
1971	22.804	5.258	4.530	116.884	90.594	6.976	12.194	51.761
1972	28.331	5.258	6.209	145.215	124.183	9.562	16.715	66.075
1973	35.198	5.258	8.232	180.413	164.638	12.677	22.160	83.525
1974	43.729	5.258	10.681	224.142	213.626	16.449	28.754	104.871
1975	54.328	5.258	13.661	278.470	273.212	21.037	36.774	131.058
1976	67.497	5.258	17.298	345.967	345.967	26.639	46.566	163.259
TOTAL	285.0	47.3	65.6			102.6	179.4	679.9

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	6.408	1.002	71.300	20.037	1.543	2.797	11.750
1969	17.282	6.408	1.002	88.582	43.727	3.367	6.105	34.163
1970	21.471	6.408	3.580	110.053	71.606	5.514	9.997	46.969
1971	26.675	6.408	5.234	136.728	104.688	8.061	14.615	60.994
1972	33.141	6.408	7.212	169.869	144.237	11.106	20.137	78.003
1973	41.173	6.408	9.591	211.042	191.818	14.770	26.779	98.721
1974	51.153	6.408	12.469	262.195	249.379	19.202	34.815	124.047
1975	63.552	6.408	15.967	325.747	319.339	24.589	44.582	155.098
1976	78.956	6.408	20.235	404.703	404.703	31.162	56.499	193.261
TOTAL	333.4	57.7	76.3			119.3	216.3	803.0

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	2.044	0.784	32.029	15.673	1.207	1.638	5.673
1969	7.763	2.044	0.784	39.792	25.481	1.962	2.663	15.216
1970	9.645	2.044	1.859	49.437	37.171	2.862	3.884	20.294
1971	11.983	2.044	2.560	61.420	51.198	3.942	5.350	25.880
1972	14.887	2.044	3.406	76.307	68.130	5.246	7.119	32.704
1973	18.496	2.044	4.433	94.803	88.670	6.828	9.266	41.067
1974	22.979	2.044	5.685	117.782	113.693	8.754	11.881	51.343
1975	28.548	2.044	7.214	146.330	144.286	11.110	15.078	63.995
1976	35.468	2.044	9.090	181.798	181.798	13.998	18.998	79.599
TOTAL	149.8	18.4	35.8			55.9	75.9	335.8

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.177	0.059	10.591	1.177	0.091	0.105	1.431
1969	0.095	1.177	0.059	10.686	2.449	0.189	0.218	1.738
1970	0.096	1.177	0.186	10.782	3.722	0.287	0.332	2.077
1971	0.097	1.177	0.250	10.880	4.996	0.385	0.445	2.354
1972	0.098	1.177	0.314	10.977	6.270	0.483	0.559	2.630
1973	0.099	1.177	0.377	11.076	7.546	0.581	0.673	2.906
1974	0.100	1.177	0.441	11.176	8.822	0.679	0.786	3.183
1975	0.101	1.177	0.505	11.277	10.100	0.778	0.900	3.460
1976	0.101	1.177	0.569	11.378	11.378	0.876	1.014	3.737
TOTAL	0.8	10.6	2.8			4.3	5.0	23.5

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.390	0.070	12.512	1.390	0.107	0.131	1.698
1969	0.113	1.390	0.070	12.625	2.893	0.223	0.273	2.068
1970	0.114	1.390	0.220	12.738	4.397	0.339	0.415	2.478
1971	0.115	1.390	0.295	12.853	5.902	0.454	0.558	2.812
1972	0.116	1.390	0.370	12.969	7.408	0.570	0.700	3.146
1973	0.117	1.390	0.446	13.085	8.915	0.686	0.842	3.481
1974	0.118	1.390	0.521	13.203	10.423	0.803	0.985	3.816
1975	0.119	1.390	0.597	13.322	11.932	0.919	1.127	4.152
1976	0.120	1.390	0.672	13.442	13.442	1.035	1.270	4.487
TOTAL	0.9	12.5	3.3			5.1	6.3	28.1

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.592	0.030	5.325	0.592	0.046	0.043	0.710
1969	0.048	0.592	0.030	5.373	1.231	0.095	0.089	0.853
1970	0.048	0.592	0.094	5.421	1.871	0.144	0.136	1.014
1971	0.049	0.592	0.126	5.470	2.512	0.193	0.183	1.142
1972	0.049	0.592	0.158	5.519	3.153	0.243	0.229	1.270
1973	0.050	0.592	0.190	5.569	3.794	0.292	0.276	1.399
1974	0.050	0.592	0.222	5.619	4.436	0.342	0.322	1.528
1975	0.051	0.592	0.254	5.670	5.078	0.391	0.369	1.656
1976	0.051	0.592	0.286	5.721	5.721	0.440	0.416	1.785
TOTAL	0.4	5.3	1.4			2.2	2.1	11.4

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	3.589	17.283	374.381	345.668	26.616	19.240	66.729
1969	3.051	3.589	17.283	377.432	352.308	27.128	19.609	70.661
1970	3.076	3.589	17.949	380.508	358.974	27.641	19.980	73.235
1971	3.101	3.589	18.283	383.609	365.664	28.156	20.353	73.482
1972	3.126	3.589	18.619	386.736	372.379	28.673	20.727	74.734
1973	3.152	3.589	18.956	389.888	379.120	29.192	21.102	75.991
1974	3.178	3.589	19.294	393.065	385.887	29.713	21.478	77.253
1975	3.203	3.589	19.634	396.269	392.680	30.236	21.857	78.519
1976	3.230	3.589	19.975	399.498	399.498	30.761	22.236	79.791
TOTAL	25.1	32.3	167.3			258.1	186.6	669.4

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	21.149	18.161	532.421	363.228	27.969	18.355	85.634
1969	4.339	21.149	18.161	536.760	388.716	29.931	19.643	93.224
1970	4.375	21.149	20.712	541.135	414.240	31.896	20.933	99.065
1971	4.410	21.149	21.990	545.545	439.800	33.865	22.225	103.638
1972	4.446	21.149	23.270	549.991	465.395	35.835	23.518	108.218
1973	4.482	21.149	24.551	554.474	491.026	37.809	24.813	112.805
1974	4.519	21.149	25.835	558.993	516.694	39.785	26.110	117.399
1975	4.556	21.149	27.120	563.548	542.399	41.765	27.409	121.999
1976	4.593	21.149	28.407	568.141	568.141	43.747	28.710	126.606
TOTAL	35.7	190.3	208.2			322.6	211.7	968.6

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	-25.380	15.835	113.657	316.699	24.386	22.308	37.149
1969	0.926	-25.380	15.835	114.583	292.245	22.503	20.586	34.470
1970	0.934	-25.380	13.390	115.517	267.798	20.620	18.864	28.428
1971	0.941	-25.380	12.168	116.459	243.360	18.739	17.142	23.610
1972	0.949	-25.380	10.946	117.408	218.929	16.858	15.421	18.794
1973	0.957	-25.380	9.725	118.365	194.505	14.977	13.701	13.980
1974	0.965	-25.380	8.504	119.329	170.090	13.097	11.981	9.167
1975	0.973	-25.380	7.284	120.302	145.682	11.218	10.262	4.356
1976	0.980	-25.380	6.064	121.282	121.282	9.339	8.543	-0.454
TOTAL	7.6	-228.4	99.8			151.7	138.8	169.5

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	8.883	0.593	82.926	11.862	0.913	0.715	11.104
1969	4.037	8.883	0.593	86.963	24.782	1.908	1.493	16.914
1970	4.233	8.883	1.895	91.196	37.898	2.918	2.284	20.213
1971	4.439	8.883	2.561	95.636	51.221	3.944	3.086	22.914
1972	4.656	8.883	3.238	100.291	64.759	4.986	3.902	25.665
1973	4.882	8.883	3.926	105.173	78.524	6.046	4.732	28.470
1974	5.120	8.883	4.626	110.293	92.527	7.125	5.576	31.329
1975	5.369	8.883	5.339	115.662	106.779	8.222	6.434	34.247
1976	5.630	8.883	6.065	121.293	121.293	9.340	7.309	37.227
TOTAL	38.4	79.9	28.8			45.4	35.5	228.1

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	10.330	0.665	95.951	13.309	1.025	0.841	12.861
1969	4.671	10.330	0.665	100.622	28.310	2.180	1.788	19.635
1970	4.898	10.330	2.177	105.520	43.539	3.352	2.750	23.508
1971	5.137	10.330	2.950	110.657	59.006	4.543	3.727	26.688
1972	5.387	10.330	3.736	116.044	74.723	5.754	4.720	29.927
1973	5.649	10.330	4.535	121.693	90.702	6.984	5.729	33.228
1974	5.924	10.330	5.348	127.617	106.956	8.236	6.756	36.594
1975	6.212	10.330	6.175	133.829	123.499	9.509	7.801	40.028
1976	6.515	10.330	7.017	140.344	140.344	10.806	8.865	43.534
TOTAL	44.4	93.0	33.3			52.4	43.0	266.0

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	3.679	0.333	36.090	6.658	0.513	0.336	4.861
1969	1.757	3.679	0.333	37.847	12.094	0.931	0.611	7.311
1970	1.842	3.679	0.881	39.689	17.615	1.356	0.890	8.649
1971	1.932	3.679	1.161	41.621	23.226	1.788	1.174	9.735
1972	2.026	3.679	1.447	43.647	28.931	2.228	1.462	10.842
1973	2.125	3.679	1.737	45.772	34.735	2.675	1.756	11.971
1974	2.228	3.679	2.032	48.000	40.642	3.129	2.054	13.123
1975	2.337	3.679	2.333	50.337	46.658	3.593	2.358	14.299
1976	2.450	3.679	2.639	52.787	52.787	4.065	2.668	15.501
TOTAL	16.7	33.1	12.9			20.3	13.3	96.3

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.767	0.038	6.899	0.767	0.059	0.105	0.969
1969	0.222	0.767	0.038	7.121	1.755	0.135	0.240	1.402
1970	0.229	0.767	0.138	7.350	2.750	0.212	0.376	1.721
1971	0.236	0.767	0.188	7.586	3.753	0.289	0.514	1.993
1972	0.244	0.767	0.238	7.830	4.764	0.367	0.652	2.267
1973	0.252	0.767	0.289	8.082	5.782	0.445	0.791	2.544
1974	0.260	0.767	0.340	8.342	6.809	0.524	0.932	2.823
1975	0.268	0.767	0.392	8.610	7.843	0.604	1.073	3.104
1976	0.277	0.767	0.444	8.887	8.887	0.684	1.216	3.388
TOTAL	2.0	6.9	2.1			3.3	5.9	20.2

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.767	0.038	6.899	0.767	0.059	0.105	0.969
1969	0.222	0.767	0.038	7.121	1.755	0.135	0.240	1.402
1970	0.229	0.767	0.138	7.350	2.750	0.212	0.376	1.721
1971	0.236	0.767	0.188	7.586	3.753	0.289	0.514	1.993
1972	0.244	0.767	0.238	7.830	4.764	0.367	0.652	2.267
1973	0.252	0.767	0.289	8.082	5.782	0.445	0.791	2.544
1974	0.260	0.767	0.340	8.342	6.809	0.524	0.932	2.823
1975	0.268	0.767	0.392	8.610	7.843	0.604	1.073	3.104
1976	0.277	0.767	0.444	8.887	8.887	0.684	1.216	3.388
TOTAL	2.0	6.9	2.1			3.3	5.9	20.2

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.478	0.024	4.301	0.478	0.037	0.053	0.592
1969	0.138	0.478	0.024	4.439	1.094	0.084	0.122	0.847
1970	0.143	0.478	0.086	4.582	1.715	0.132	0.192	1.030
1971	0.147	0.478	0.117	4.729	2.340	0.180	0.262	1.184
1972	0.152	0.478	0.148	4.881	2.970	0.229	0.332	1.339
1973	0.157	0.478	0.180	5.038	3.605	0.278	0.403	1.496
1974	0.162	0.478	0.212	5.200	4.245	0.327	0.475	1.654
1975	0.167	0.478	0.244	5.368	4.890	0.377	0.547	1.813
1976	0.173	0.478	0.277	5.540	5.540	0.427	0.620	1.974
TOTAL	1.2	4.3	1.3			2.1	3.0	11.9

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	6.960	1.197	79.616	23.932	1.843	1.006	11.006
1969	1.885	6.960	1.197	81.501	32.778	2.524	1.378	13.944
1970	1.929	6.960	2.083	83.430	41.668	3.208	1.752	15.933
1971	1.975	6.960	2.530	85.405	50.603	3.896	2.127	17.489
1972	2.022	6.960	2.979	87.427	59.586	4.588	2.505	19.055
1973	2.070	6.960	3.431	89.497	68.616	5.283	2.885	20.629
1974	2.119	6.960	3.885	91.616	77.695	5.983	3.266	22.213
1975	2.169	6.960	4.341	93.785	86.824	6.685	3.650	23.806
1976	2.220	6.960	4.800	96.005	96.005	7.392	4.036	25.409
TOTAL	16.4	62.6	26.4			41.4	22.6	169.5

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	6.989	1.198	79.877	23.961	1.845	1.009	11.041
1969	1.891	6.989	1.198	81.768	32.842	2.529	1.382	13.990
1970	1.936	6.989	2.088	83.704	41.767	3.216	1.758	15.988
1971	1.982	6.989	2.537	85.685	50.738	3.907	2.136	17.550
1972	2.029	6.989	2.988	87.714	59.756	4.601	2.515	19.122
1973	2.077	6.989	3.441	89.790	68.822	5.299	2.897	20.703
1974	2.126	6.989	3.897	91.916	77.937	6.001	3.280	22.294
1975	2.176	6.989	4.355	94.092	87.103	6.707	3.666	23.894
1976	2.228	6.989	4.816	96.320	96.320	7.417	4.054	25.504
TOTAL	16.4	62.9	26.5			41.5	22.7	170.1

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	3.630	1.030	49.645	20.602	1.586	0.771	7.017
1969	1.175	3.630	1.030	50.820	25.408	1.956	0.950	8.743
1970	1.203	3.630	1.512	52.023	30.241	2.329	1.131	9.805
1971	1.232	3.630	1.755	53.255	35.103	2.703	1.313	10.633
1972	1.261	3.630	2.000	54.516	39.994	3.080	1.496	11.466
1973	1.291	3.630	2.246	55.806	44.915	3.458	1.680	12.305
1974	1.321	3.630	2.493	57.128	49.867	3.840	1.865	13.150
1975	1.352	3.630	2.742	58.480	54.850	4.223	2.052	14.000
1976	1.384	3.630	2.993	59.864	59.864	4.610	2.239	14.857
TOTAL	10.2	32.7	17.8			27.8	13.5	102.0

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 321-3 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	2.682	0.444	30.330	8.873	0.683	0.773	4.582
1969	-0.073	2.682	0.444	30.257	11.482	0.884	1.000	4.937
1970	-0.073	2.682	0.705	30.185	14.092	1.085	1.227	5.626
1971	-0.072	2.682	0.835	30.112	16.702	1.286	1.454	6.185
1972	-0.072	2.682	0.966	30.040	19.311	1.487	1.682	6.744
1973	-0.072	2.682	1.096	29.968	21.921	1.688	1.909	7.303
1974	-0.072	2.682	1.227	29.896	24.531	1.889	2.136	7.862
1975	-0.072	2.682	1.357	29.824	27.142	2.090	2.363	8.421
1976	-0.072	2.682	1.488	29.752	29.752	2.291	2.591	8.980
TOTAL	-0.6	24.1	8.6			13.4	15.1	60.6

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	3.036	0.461	33.515	9.227	0.710	0.821	5.029
1969	-0.080	3.036	0.461	33.435	12.183	0.938	1.084	5.439
1970	-0.080	3.036	0.757	33.354	15.138	1.166	1.347	6.226
1971	-0.080	3.036	0.905	33.274	18.094	1.393	1.610	6.864
1972	-0.080	3.036	1.053	33.194	21.050	1.621	1.874	7.503
1973	-0.080	3.036	1.200	33.115	24.007	1.849	2.137	8.142
1974	-0.080	3.036	1.348	33.035	26.963	2.076	2.400	8.781
1975	-0.079	3.036	1.496	32.956	29.920	2.304	2.663	9.419
1976	-0.079	3.036	1.644	32.877	32.877	2.532	2.926	10.058
TOTAL	-0.6	27.3	9.3			14.6	16.9	67.5

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.142	0.367	16.473	7.333	0.565	0.504	2.578
1969	-0.040	1.142	0.367	16.433	8.436	0.650	0.580	2.699
1970	-0.039	1.142	0.477	16.394	9.539	0.735	0.656	2.971
1971	-0.039	1.142	0.532	16.355	10.642	0.819	0.732	3.187
1972	-0.039	1.142	0.587	16.315	11.746	0.904	0.808	3.403
1973	-0.039	1.142	0.642	16.276	12.849	0.989	0.884	3.619
1974	-0.039	1.142	0.698	16.237	13.952	1.074	0.960	3.835
1975	-0.039	1.142	0.753	16.198	15.056	1.159	1.036	4.051
1976	-0.039	1.142	0.808	16.159	16.159	1.244	1.111	4.267
TOTAL	-0.3	10.3	5.2			8.1	7.3	30.6

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	2.471	0.230	24.363	4.591	0.354	0.488	3.543
1969	-0.380	2.471	0.230	23.983	6.683	0.515	0.711	3.546
1970	-0.374	2.471	0.439	23.609	8.780	0.676	0.934	4.146
1971	-0.368	2.471	0.544	23.241	10.884	0.838	1.157	4.643
1972	-0.362	2.471	0.650	22.879	12.993	1.000	1.382	5.141
1973	-0.357	2.471	0.755	22.522	15.107	1.163	1.607	5.640
1974	-0.351	2.471	0.861	22.171	17.228	1.327	1.832	6.140
1975	-0.346	2.471	0.968	21.825	19.353	1.490	2.058	6.642
1976	-0.340	2.471	1.074	21.484	21.484	1.654	2.285	7.145
TOTAL	-2.9	22.2	5.8			9.0	12.5	46.6

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	3.224	0.267	31.137	5.344	0.411	0.619	4.522
1969	-0.486	3.224	0.267	30.651	8.083	0.622	0.937	4.565
1970	-0.478	3.224	0.541	30.173	10.829	0.834	1.255	5.377
1971	-0.471	3.224	0.679	29.703	13.582	1.046	1.574	6.053
1972	-0.463	3.224	0.817	29.240	16.343	1.258	1.894	6.731
1973	-0.456	3.224	0.956	28.784	19.111	1.472	2.215	7.410
1974	-0.449	3.224	1.094	28.335	21.887	1.685	2.537	8.092
1975	-0.442	3.224	1.233	27.893	24.669	1.900	2.859	8.775
1976	-0.435	3.224	1.373	27.458	27.458	2.114	3.183	9.459
TOTAL	-3.7	29.0	7.2			11.3	17.1	61.0

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.063	0.159	11.688	3.183	0.245	0.263	1.730
1969	-0.182	1.063	0.159	11.506	4.064	0.313	0.336	1.688
1970	-0.179	1.063	0.247	11.326	4.948	0.381	0.408	1.921
1971	-0.177	1.063	0.292	11.150	5.834	0.449	0.482	2.109
1972	-0.174	1.063	0.336	10.976	6.723	0.518	0.555	2.298
1973	-0.171	1.063	0.381	10.805	7.615	0.586	0.629	2.488
1974	-0.168	1.063	0.425	10.636	8.510	0.655	0.703	2.678
1975	-0.166	1.063	0.470	10.470	9.407	0.724	0.777	2.869
1976	-0.163	1.063	0.515	10.307	10.307	0.794	0.851	3.060
TOTAL	-1.4	9.6	3.0			4.7	5.0	20.8

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 325-6 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.552	0.028	4.964	0.552	0.042	0.035	0.657
1969	-0.000	0.552	0.028	4.964	1.103	0.085	0.071	0.734
1970	-0.000	0.552	0.083	4.964	1.654	0.127	0.106	0.867
1971	-0.000	0.552	0.110	4.963	2.205	0.170	0.141	0.973
1972	-0.000	0.552	0.138	4.963	2.757	0.212	0.177	1.078
1973	-0.000	0.552	0.165	4.963	3.308	0.255	0.212	1.183
1974	-0.000	0.552	0.193	4.963	3.859	0.297	0.247	1.289
1975	-0.000	0.552	0.221	4.962	4.411	0.340	0.283	1.394
1976	-0.000	0.552	0.248	4.962	4.962	0.382	0.318	1.499
TOTAL	-0.0	5.0	1.2			1.9	1.6	9.7

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.662	0.033	5.956	0.662	0.051	0.045	0.791
1969	-0.000	0.662	0.033	5.956	1.323	0.102	0.091	0.887
1970	-0.000	0.662	0.099	5.955	1.985	0.153	0.136	1.050
1971	-0.000	0.662	0.132	5.955	2.646	0.204	0.182	1.179
1972	-0.000	0.662	0.165	5.955	3.308	0.255	0.227	1.309
1973	-0.000	0.662	0.198	5.955	3.969	0.306	0.273	1.438
1974	-0.000	0.662	0.232	5.954	4.631	0.357	0.318	1.568
1975	-0.000	0.662	0.265	5.954	5.292	0.407	0.363	1.697
1976	-0.000	0.662	0.298	5.954	5.954	0.458	0.409	1.826
TOTAL	-0.0	6.0	1.5			2.3	2.0	11.7

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.287	0.014	2.579	0.287	0.022	0.014	0.337
1969	-0.000	0.287	0.014	2.579	0.573	0.044	0.028	0.373
1970	-0.000	0.287	0.043	2.579	0.859	0.066	0.042	0.438
1971	-0.000	0.287	0.057	2.579	1.146	0.088	0.056	0.488
1972	-0.000	0.287	0.072	2.578	1.432	0.110	0.070	0.538
1973	-0.000	0.287	0.086	2.578	1.719	0.132	0.084	0.589
1974	-0.000	0.287	0.100	2.578	2.005	0.154	0.098	0.639
1975	-0.000	0.287	0.115	2.578	2.292	0.176	0.112	0.689
1976	-0.000	0.287	0.129	2.578	2.578	0.199	0.126	0.740
TOTAL	-0.0	2.6	0.6			1.0	0.6	4.8

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	4.415	0.379	42.904	7.585	0.584	0.803	6.181
1969	1.963	4.415	0.379	44.867	13.962	1.075	1.478	9.310
1970	2.052	4.415	1.021	46.919	20.430	1.573	2.163	11.225
1971	2.146	4.415	1.350	49.065	26.991	2.078	2.857	12.846
1972	2.244	4.415	1.683	51.310	33.650	2.591	3.562	14.495
1973	2.347	4.415	2.021	53.657	40.412	3.112	4.278	16.173
1974	2.455	4.415	2.364	56.112	47.282	3.641	5.005	17.880
1975	2.567	4.415	2.713	58.678	54.264	4.178	5.745	19.618
1976	2.684	4.415	3.068	61.363	61.363	4.725	6.496	21.388
TOTAL	18.5	39.7	15.0			23.6	32.4	129.1

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	5.185	0.418	49.839	8.355	0.643	0.943	7.190
1969	2.280	5.185	0.418	52.119	15.821	1.218	1.786	10.888
1970	2.384	5.185	1.170	54.503	23.390	1.801	2.641	13.181
1971	2.493	5.185	1.553	56.996	31.069	2.392	3.508	15.132
1972	2.607	5.185	1.943	59.604	38.862	2.992	4.388	17.116
1973	2.727	5.185	2.339	62.330	46.774	3.602	5.281	19.133
1974	2.851	5.185	2.741	65.181	54.811	4.220	6.188	21.186
1975	2.982	5.185	3.149	68.163	62.978	4.849	7.110	23.276
1976	3.118	5.185	3.564	71.281	71.281	5.489	8.048	25.404
TOTAL	21.4	46.7	17.3			27.2	39.9	152.5

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.741	0.246	18.839	4.911	0.378	0.387	2.752
1969	0.862	1.741	0.246	19.701	7.514	0.579	0.593	4.020
1970	0.901	1.741	0.508	20.602	10.156	0.782	0.801	4.733
1971	0.942	1.741	0.642	21.544	12.839	0.989	1.013	5.327
1972	0.986	1.741	0.778	22.530	15.566	1.199	1.228	5.931
1973	1.031	1.741	0.917	23.561	18.338	1.412	1.446	6.547
1974	1.078	1.741	1.058	24.638	21.156	1.629	1.669	7.174
1975	1.127	1.741	1.201	25.765	24.024	1.850	1.895	7.814
1976	1.179	1.741	1.347	26.944	26.944	2.075	2.125	8.467
TOTAL	8.1	15.7	6.9			10.9	11.2	52.8

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 328 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.500	0.025	4.500	0.500	0.038	0.043	0.606
1969	0.144	0.500	0.025	4.644	1.144	0.088	0.098	0.855
1970	0.148	0.500	0.090	4.792	1.792	0.138	0.153	1.029
1971	0.153	0.500	0.122	4.945	2.445	0.188	0.209	1.173
1972	0.158	0.500	0.155	5.103	3.103	0.239	0.265	1.317
1973	0.163	0.500	0.188	5.266	3.766	0.290	0.322	1.463
1974	0.168	0.500	0.222	5.434	4.434	0.341	0.379	1.611
1975	0.174	0.500	0.255	5.608	5.108	0.393	0.437	1.759
1976	0.179	0.500	0.289	5.787	5.787	0.446	0.495	1.909
TOTAL	1.3	4.5	1.4			2.2	2.4	11.7

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.553	0.028	4.977	0.553	0.043	0.049	0.672
1969	0.159	0.553	0.028	5.136	1.265	0.097	0.112	0.949
1970	0.164	0.553	0.099	5.300	1.982	0.153	0.175	1.144
1971	0.169	0.553	0.135	5.469	2.704	0.208	0.239	1.305
1972	0.175	0.553	0.172	5.644	3.432	0.264	0.303	1.467
1973	0.180	0.553	0.208	5.824	4.165	0.321	0.368	1.630
1974	0.186	0.553	0.245	6.010	4.904	0.378	0.434	1.795
1975	0.192	0.553	0.282	6.202	5.649	0.435	0.499	1.962
1976	0.198	0.553	0.320	6.400	6.400	0.493	0.566	2.130
TOTAL	1.4	5.0	1.5			2.4	2.7	13.1

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.225	0.011	2.027	0.225	0.017	0.014	0.268
1969	0.065	0.225	0.011	2.092	0.515	0.040	0.033	0.374
1970	0.067	0.225	0.040	2.159	0.807	0.062	0.051	0.446
1971	0.069	0.225	0.055	2.227	1.101	0.085	0.070	0.504
1972	0.071	0.225	0.070	2.299	1.398	0.108	0.089	0.563
1973	0.073	0.225	0.085	2.372	1.696	0.131	0.108	0.622
1974	0.076	0.225	0.100	2.448	1.997	0.154	0.127	0.682
1975	0.078	0.225	0.115	2.526	2.301	0.177	0.146	0.742
1976	0.081	0.225	0.130	2.607	2.607	0.201	0.166	0.803
TOTAL	0.6	2.0	0.6			1.0	0.8	5.0

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	4.748	0.575	49.493	11.508	0.886	1.587	7.797
1969	1.222	4.748	0.575	50.715	17.478	1.346	2.411	10.302
1970	1.252	4.748	1.174	51.968	23.479	1.808	3.239	12.221
1971	1.283	4.748	1.476	53.251	29.510	2.272	4.071	13.850
1972	1.315	4.748	1.779	54.566	35.573	2.739	4.907	15.488
1973	1.347	4.748	2.083	55.913	41.669	3.209	5.748	17.135
1974	1.381	4.748	2.390	57.294	47.798	3.680	6.593	18.792
1975	1.415	4.748	2.698	58.709	53.961	4.155	7.443	20.459
1976	1.450	4.748	3.008	60.159	60.159	4.632	8.298	22.136
TOTAL	10.7	42.7	15.8			24.7	44.3	138.2

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	5.565	0.616	56.845	12.325	0.949	1.778	8.908
1969	1.404	5.565	0.616	58.249	19.294	1.486	2.783	11.854
1970	1.438	5.565	1.315	59.687	26.297	2.025	3.793	14.137
1971	1.474	5.565	1.667	61.161	33.336	2.567	4.809	16.081
1972	1.510	5.565	2.021	62.671	40.411	3.112	5.829	18.037
1973	1.548	5.565	2.376	64.219	47.524	3.659	6.855	20.004
1974	1.586	5.565	2.734	65.805	54.675	4.210	7.887	21.981
1975	1.625	5.565	3.093	67.430	61.865	4.764	8.924	23.971
1976	1.665	5.565	3.455	69.095	69.095	5.320	9.967	25.972
TOTAL	12.2	50.1	17.9			28.1	52.6	160.9

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.581	0.417	20.987	8.341	0.642	0.911	3.551
1969	0.518	1.581	0.417	21.505	10.440	0.804	1.140	4.460
1970	0.531	1.581	0.628	22.036	12.552	0.966	1.370	5.076
1971	0.544	1.581	0.734	22.580	14.677	1.130	1.602	5.591
1972	0.558	1.581	0.841	23.138	16.815	1.295	1.836	6.109
1973	0.571	1.581	0.948	23.709	18.967	1.460	2.071	6.631
1974	0.585	1.581	1.057	24.295	21.133	1.627	2.307	7.157
1975	0.600	1.581	1.166	24.895	23.314	1.795	2.545	7.687
1976	0.615	1.581	1.275	25.510	25.510	1.964	2.785	8.220
TOTAL	4.5	14.2	7.5			11.7	16.6	54.5

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 33X <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	10.262	1.207	106.233	24.140	1.859	2.655	15.982
1969	18.252	10.262	1.207	124.485	52.653	4.054	5.790	39.565
1970	21.388	10.262	4.215	145.873	84.303	6.491	9.270	51.626
1971	25.062	10.262	5.981	170.935	119.627	9.211	13.155	63.671
1972	29.368	10.262	7.963	200.303	159.257	12.263	17.513	77.368
1973	34.414	10.262	10.197	234.717	203.932	15.703	22.426	93.001
1974	40.327	10.262	12.726	275.044	254.521	19.598	27.989	110.901
1975	47.255	10.262	15.602	322.300	312.038	24.027	34.314	131.459
1976	55.374	10.262	18.884	377.674	377.674	29.081	41.531	155.132
TOTAL	271.4	92.4	78.0			122.3	174.6	738.7

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.201	0.754	24.686	15.079	1.161	9.892	13.008
1969	4.241	1.201	0.754	28.927	20.521	1.580	13.463	21.239
1970	4.970	1.201	1.335	33.897	26.692	2.055	17.511	27.072
1971	5.824	1.201	1.686	39.721	33.717	2.596	22.120	33.426
1972	6.824	1.201	2.087	46.546	41.742	3.214	27.385	40.711
1973	7.997	1.201	2.547	54.543	50.940	3.922	33.419	49.086
1974	9.371	1.201	3.076	63.914	61.512	4.736	40.354	58.738
1975	10.981	1.201	3.685	74.895	73.694	5.674	48.346	69.887
1976	12.868	1.201	4.388	87.762	87.762	6.758	57.576	82.790
TOTAL	63.1	10.8	20.3			31.7	270.1	396.0

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	3.110	0.849	41.864	16.988	1.308	1.333	6.600
1969	7.193	3.110	0.849	49.057	27.290	2.101	2.142	15.395
1970	8.428	3.110	1.941	57.485	38.828	2.990	3.048	19.517
1971	9.877	3.110	2.591	67.362	51.814	3.990	4.067	23.633
1972	11.573	3.110	3.325	78.935	66.497	5.120	5.219	28.348
1973	13.562	3.110	4.158	92.497	83.168	6.404	6.528	33.762
1974	15.892	3.110	5.108	108.389	102.170	7.867	8.020	39.996
1975	18.622	3.110	6.195	127.011	123.901	9.540	9.725	47.193
1976	21.822	3.110	7.442	148.833	148.833	11.460	11.682	55.515
TOTAL	107.0	28.0	32.5			50.8	51.8	270.0

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 331X <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	-1.880	1.575	16.467	31.504	2.426	3.555	5.676
1969	0.347	-1.880	1.575	16.814	29.972	2.308	3.382	5.732
1970	0.354	-1.880	1.422	17.168	28.446	2.190	3.210	5.297
1971	0.362	-1.880	1.346	17.530	26.928	2.073	3.038	4.940
1972	0.369	-1.880	1.271	17.899	25.418	1.957	2.868	4.586
1973	0.377	-1.880	1.196	18.276	23.915	1.841	2.698	4.233
1974	0.385	-1.880	1.121	18.661	22.421	1.726	2.530	3.883
1975	0.393	-1.880	1.047	19.054	20.934	1.612	2.362	3.534
1976	0.401	-1.880	0.973	19.456	19.456	1.498	2.195	3.188
TOTAL	3.0	-16.9	11.5			17.6	25.8	41.1

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	-1.227	1.608	22.339	32.157	2.476	4.069	6.926
1969	0.471	-1.227	1.608	22.810	31.400	2.418	3.974	7.243
1970	0.481	-1.227	1.533	23.290	30.654	2.360	3.879	7.026
1971	0.491	-1.227	1.496	23.781	29.917	2.304	3.786	6.849
1972	0.501	-1.227	1.460	24.282	29.191	2.248	3.694	6.675
1973	0.512	-1.227	1.424	24.793	28.475	2.193	3.604	6.504
1974	0.522	-1.227	1.389	25.316	27.770	2.138	3.514	6.336
1975	0.533	-1.227	1.354	25.849	27.076	2.085	3.427	6.171
1976	0.545	-1.227	1.320	26.394	26.394	2.032	3.340	6.010
TOTAL	4.1	-11.0	13.2			20.3	33.3	59.7

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	-2.995	1.519	6.433	30.389	2.340	2.390	3.255
1969	0.136	-2.995	1.519	6.569	27.530	2.120	2.165	2.946
1970	0.138	-2.995	1.234	6.707	24.674	1.900	1.941	2.218
1971	0.141	-2.995	1.091	6.848	21.821	1.680	1.716	1.634
1972	0.144	-2.995	0.949	6.992	18.971	1.461	1.492	1.051
1973	0.147	-2.995	0.806	7.140	16.123	1.242	1.268	0.469
1974	0.150	-2.995	0.664	7.290	13.279	1.023	1.045	-0.113
1975	0.154	-2.995	0.522	7.444	10.438	0.804	0.821	-0.694
1976	0.157	-2.995	0.380	7.601	7.601	0.585	0.598	-1.275
TOTAL	1.2	-27.0	8.7			13.2	13.4	9.5

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 3312 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	73.393	11.501	817.176	230.028	17.712	26.510	129.117
1969	28.508	73.393	11.501	845.684	331.930	25.559	38.253	177.215
1970	29.503	73.393	21.741	875.187	434.826	33.482	50.111	208.230
1971	30.532	73.393	26.938	905.718	538.751	41.484	62.088	234.435
1972	31.597	73.393	32.187	937.315	643.741	49.568	74.188	260.933
1973	32.699	73.393	37.492	970.014	749.834	57.737	86.414	287.736
1974	33.840	73.393	42.853	1003.854	857.067	65.994	98.772	314.853
1975	35.020	73.393	48.274	1038.875	965.481	74.342	111.266	342.296
1976	36.242	73.393	53.756	1075.117	1075.117	82.784	123.901	370.077
TOTAL	257.9	660.5	286.2			448.7	671.5	2324.9

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	121.402	13.902	1249.256	278.037	21.409	26.099	182.812
1969	43.582	121.402	13.902	1292.838	443.021	34.113	41.586	254.584
1970	45.102	121.402	30.476	1337.939	609.525	46.933	57.215	301.129
1971	46.675	121.402	38.880	1384.615	777.603	59.875	72.993	339.826
1972	48.304	121.402	47.365	1432.919	947.309	72.943	88.923	378.937
1973	49.989	121.402	55.935	1482.907	1118.700	86.140	105.011	418.477
1974	51.733	121.402	64.592	1534.640	1291.835	99.471	121.263	458.461
1975	53.537	121.402	73.339	1588.177	1466.775	112.942	137.684	498.904
1976	55.405	121.402	82.179	1643.583	1643.583	126.556	154.281	539.823
TOTAL	394.3	1092.6	420.6			660.4	805.1	3373.0

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	4.226	8.043	194.667	160.861	12.386	22.646	47.301
1969	6.791	4.226	8.043	201.458	171.878	13.235	24.197	56.491
1970	7.028	4.226	9.157	208.486	183.132	14.101	25.781	60.293
1971	7.273	4.226	9.732	215.759	194.631	14.987	27.400	63.617
1972	7.527	4.226	10.319	223.286	206.383	15.892	29.054	67.018
1973	7.790	4.226	10.920	231.076	218.399	16.817	30.746	70.498
1974	8.061	4.226	11.534	239.137	230.686	17.763	32.476	74.060
1975	8.343	4.226	12.163	247.480	243.254	18.731	34.245	77.707
1976	8.634	4.226	12.806	256.113	256.113	19.721	36.055	81.441
TOTAL	61.4	38.0	92.7			143.6	262.6	598.4

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 3312 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	73.393	11.501	817.176	230.028	17.712	26.510	129.117
1969	28.508	73.393	11.501	845.684	331.930	25.559	38.253	177.215
1970	29.503	73.393	21.741	875.187	434.826	33.482	50.111	208.230
1971	30.532	73.393	26.938	905.718	538.751	41.484	62.088	234.435
1972	31.597	73.393	32.187	937.315	643.741	49.568	74.188	260.933
1973	32.699	73.393	37.492	970.014	749.834	57.737	86.414	287.736
1974	33.840	73.393	42.853	1003.854	857.067	65.994	98.772	314.853
1975	35.020	73.393	48.274	1038.875	965.481	74.342	111.266	342.296
1976	36.242	73.393	53.756	1075.117	1075.117	82.784	123.901	370.077
TOTAL	257.9	660.5	286.2			448.7	671.5	2324.9

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	121.402	13.902	1249.256	278.037	21.409	26.099	182.812
1969	43.582	121.402	13.902	1292.838	443.021	34.113	41.586	254.584
1970	45.102	121.402	30.476	1337.939	609.525	46.933	57.215	301.129
1971	46.675	121.402	38.880	1384.615	777.603	59.875	72.993	339.826
1972	48.304	121.402	47.365	1432.919	947.309	72.943	88.923	378.937
1973	49.989	121.402	55.935	1482.907	1118.700	86.140	105.011	418.477
1974	51.733	121.402	64.592	1534.640	1291.835	99.471	121.263	458.461
1975	53.537	121.402	73.339	1588.177	1466.775	112.942	137.684	498.904
1976	55.405	121.402	82.179	1643.583	1643.583	126.556	154.281	539.823
TOTAL	394.3	1092.6	420.6			660.4	805.1	3373.0

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	4.226	8.043	194.667	160.861	12.386	22.646	47.301
1969	6.791	4.226	8.043	201.458	171.878	13.235	24.197	56.491
1970	7.028	4.226	9.157	208.486	183.132	14.101	25.781	60.293
1971	7.273	4.226	9.732	215.759	194.631	14.987	27.400	63.617
1972	7.527	4.226	10.319	223.286	206.383	15.892	29.054	67.018
1973	7.790	4.226	10.920	231.076	218.399	16.817	30.746	70.498
1974	8.061	4.226	11.534	239.137	230.686	17.763	32.476	74.060
1975	8.343	4.226	12.163	247.480	243.254	18.731	34.245	77.707
1976	8.634	4.226	12.806	256.113	256.113	19.721	36.055	81.441
TOTAL	61.4	38.0	92.7			143.6	262.6	598.4

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 332X <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.550	0.096	6.330	1.929	0.149	0.111	0.906
1969	0.107	0.550	0.096	6.437	2.586	0.199	0.149	1.102
1970	0.109	0.550	0.162	6.546	3.246	0.250	0.187	1.258
1971	0.111	0.550	0.195	6.657	3.907	0.301	0.225	1.382
1972	0.113	0.550	0.228	6.770	4.569	0.352	0.263	1.507
1973	0.115	0.550	0.262	6.885	5.234	0.403	0.302	1.631
1974	0.117	0.550	0.295	7.001	5.901	0.454	0.340	1.756
1975	0.119	0.550	0.328	7.120	6.570	0.506	0.379	1.882
1976	0.121	0.550	0.362	7.240	7.240	0.558	0.417	2.008
TOTAL	0.9	5.0	2.0			3.2	2.4	13.4

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.701	0.104	7.692	2.080	0.160	0.129	1.095
1969	0.130	0.701	0.104	7.822	2.912	0.224	0.181	1.341
1970	0.133	0.701	0.187	7.955	3.746	0.288	0.232	1.542
1971	0.135	0.701	0.229	8.090	4.582	0.353	0.284	1.702
1972	0.137	0.701	0.271	8.227	5.421	0.417	0.336	1.863
1973	0.139	0.701	0.313	8.366	6.262	0.482	0.388	2.024
1974	0.142	0.701	0.355	8.508	7.105	0.547	0.441	2.186
1975	0.144	0.701	0.398	8.652	7.950	0.612	0.493	2.348
1976	0.147	0.701	0.440	8.798	8.798	0.677	0.546	2.511
TOTAL	1.1	6.3	2.4			3.8	3.0	16.6

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.191	0.078	3.095	1.570	0.121	0.077	0.467
1969	0.052	0.191	0.078	3.147	1.813	0.140	0.088	0.550
1970	0.053	0.191	0.103	3.201	2.057	0.158	0.100	0.606
1971	0.054	0.191	0.115	3.255	2.302	0.177	0.112	0.649
1972	0.055	0.191	0.127	3.310	2.547	0.196	0.124	0.694
1973	0.056	0.191	0.140	3.366	2.794	0.215	0.136	0.738
1974	0.057	0.191	0.152	3.423	3.042	0.234	0.148	0.782
1975	0.058	0.191	0.165	3.481	3.291	0.253	0.161	0.827
1976	0.059	0.191	0.177	3.540	3.540	0.273	0.173	0.872
TOTAL	0.4	1.7	1.1			1.8	1.1	6.2

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 3321 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.045	0.256	13.480	5.119	0.394	0.380	2.075
1969	0.627	1.045	0.256	14.107	6.791	0.523	0.504	2.956
1970	0.656	1.045	0.425	14.764	8.493	0.654	0.631	3.411
1971	0.687	1.045	0.511	15.450	10.225	0.787	0.759	3.790
1972	0.719	1.045	0.599	16.169	11.989	0.923	0.890	4.177
1973	0.752	1.045	0.689	16.922	13.786	1.062	1.024	4.572
1974	0.787	1.045	0.781	17.709	15.619	1.203	1.160	4.976
1975	0.824	1.045	0.874	18.533	17.488	1.347	1.299	5.389
1976	0.862	1.045	0.970	19.395	19.395	1.493	1.440	5.811
TOTAL	5.9	9.4	5.4			8.4	8.1	37.2

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.411	0.274	16.773	5.485	0.422	0.451	2.558
1969	0.780	1.411	0.274	17.553	7.676	0.591	0.631	3.687
1970	0.817	1.411	0.495	18.370	9.904	0.763	0.814	4.295
1971	0.855	1.411	0.608	19.225	12.170	0.937	1.000	4.811
1972	0.894	1.411	0.724	20.119	14.475	1.115	1.189	5.333
1973	0.936	1.411	0.841	21.055	16.822	1.295	1.382	5.866
1974	0.980	1.411	0.961	22.035	19.213	1.479	1.578	6.409
1975	1.025	1.411	1.082	23.060	21.649	1.667	1.779	6.964
1976	1.073	1.411	1.207	24.133	24.133	1.858	1.983	7.532
TOTAL	7.4	12.7	6.5			10.1	10.8	47.5

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.099	0.209	4.967	4.173	0.321	0.226	0.855
1969	0.231	0.099	0.209	5.198	4.504	0.347	0.244	1.130
1970	0.242	0.099	0.242	5.440	4.845	0.373	0.262	1.219
1971	0.253	0.099	0.260	5.693	5.197	0.400	0.281	1.294
1972	0.265	0.099	0.278	5.958	5.561	0.428	0.301	1.372
1973	0.277	0.099	0.297	6.235	5.938	0.457	0.322	1.452
1974	0.290	0.099	0.316	6.525	6.327	0.487	0.343	1.535
1975	0.304	0.099	0.336	6.829	6.730	0.518	0.364	1.622
1976	0.318	0.099	0.357	7.147	7.147	0.550	0.387	1.712
TOTAL	2.2	0.9	2.5			3.9	2.7	12.2

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 3332-3 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.753	0.038	6.776	0.753	0.058	0.100	0.948
1969	0.441	0.753	0.038	7.217	1.946	0.150	0.258	1.639
1970	0.469	0.753	0.158	7.686	3.168	0.244	0.420	2.044
1971	0.500	0.753	0.221	8.186	4.421	0.340	0.586	2.400
1972	0.532	0.753	0.285	8.718	5.706	0.439	0.756	2.766
1973	0.567	0.753	0.351	9.285	7.026	0.541	0.931	3.143
1974	0.604	0.753	0.419	9.888	8.382	0.645	1.111	3.532
1975	0.643	0.753	0.489	10.531	9.778	0.753	1.296	3.934
1976	0.685	0.753	0.561	11.216	11.216	0.864	1.486	4.348
TOTAL	4.4	6.8	2.6			4.0	6.9	24.8

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.990	0.049	8.907	0.990	0.076	0.145	1.261
1969	0.579	0.990	0.049	9.486	2.558	0.197	0.375	2.191
1970	0.617	0.990	0.208	10.103	4.165	0.321	0.611	2.747
1971	0.657	0.990	0.291	10.760	5.811	0.447	0.853	3.237
1972	0.700	0.990	0.375	11.459	7.501	0.578	1.101	3.743
1973	0.745	0.990	0.462	12.205	9.236	0.711	1.355	4.263
1974	0.794	0.990	0.551	12.998	11.019	0.848	1.617	4.799
1975	0.845	0.990	0.643	13.843	12.854	0.990	1.886	5.353
1976	0.900	0.990	0.737	14.743	14.743	1.135	2.163	5.926
TOTAL	5.8	8.9	3.4			5.3	10.1	33.5

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.378	0.019	3.406	0.378	0.029	0.041	0.468
1969	0.221	0.378	0.019	3.627	0.978	0.075	0.106	0.800
1970	0.236	0.378	0.080	3.863	1.593	0.123	0.173	0.990
1971	0.251	0.378	0.111	4.115	2.222	0.171	0.241	1.153
1972	0.268	0.378	0.143	4.382	2.868	0.221	0.312	1.322
1973	0.285	0.378	0.177	4.667	3.532	0.272	0.384	1.496
1974	0.303	0.378	0.211	4.970	4.214	0.324	0.458	1.675
1975	0.323	0.378	0.246	5.294	4.915	0.378	0.534	1.860
1976	0.344	0.378	0.282	5.638	5.638	0.434	0.612	2.051
TOTAL	2.2	3.4	1.3			2.0	2.9	11.8

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 3334 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	11.017	0.811	104.354	16.219	1.249	0.453	13.530
1969	1.415	11.017	0.811	105.769	28.651	2.206	0.801	16.250
1970	1.435	11.017	2.055	107.204	41.103	3.165	1.149	18.821
1971	1.454	11.017	2.679	108.658	53.574	4.125	1.498	20.772
1972	1.474	11.017	3.303	110.132	66.065	5.087	1.847	22.728
1973	1.494	11.017	3.929	111.626	78.575	6.050	2.196	24.686
1974	1.514	11.017	4.555	113.140	91.106	7.015	2.547	26.648
1975	1.535	11.017	5.183	114.675	103.658	7.982	2.898	28.614
1976	1.555	11.017	5.812	116.230	116.230	8.950	3.249	30.583
TOTAL	11.9	99.2	29.1			45.8	16.6	202.6

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	15.742	1.047	146.884	20.944	1.613	0.573	18.975
1969	1.992	15.742	1.047	148.876	38.679	2.978	1.058	22.818
1970	2.019	15.742	2.822	150.896	56.441	4.346	1.543	26.473
1971	2.047	15.742	3.712	152.942	74.230	5.716	2.030	29.246
1972	2.075	15.742	4.602	155.017	92.047	7.088	2.517	32.024
1973	2.103	15.742	5.495	157.120	109.892	8.462	3.005	34.806
1974	2.131	15.742	6.388	159.251	127.766	9.838	3.493	37.593
1975	2.160	15.742	7.283	161.411	145.668	11.216	3.983	40.385
1976	2.189	15.742	8.180	163.600	163.600	12.597	4.473	43.182
TOTAL	16.7	141.7	40.6			63.9	22.7	285.5

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	3.738	0.447	38.841	8.940	0.688	0.267	5.140
1969	0.527	3.738	0.447	39.368	13.204	1.017	0.395	6.123
1970	0.534	3.738	0.874	39.902	17.476	1.346	0.523	7.014
1971	0.541	3.738	1.088	40.443	21.755	1.675	0.651	7.693
1972	0.549	3.738	1.302	40.992	26.041	2.005	0.779	8.373
1973	0.556	3.738	1.517	41.548	30.335	2.336	0.908	9.054
1974	0.564	3.738	1.732	42.111	34.636	2.667	1.036	9.736
1975	0.571	3.738	1.947	42.682	38.945	2.999	1.165	10.420
1976	0.579	3.738	2.163	43.261	43.261	3.331	1.294	11.105
TOTAL	4.4	33.6	11.5			18.1	7.0	74.7

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 3331 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	1.913	0.185	19.003	3.703	0.285	0.345	2.728
1969	0.453	1.913	0.185	19.456	6.068	0.467	0.566	3.583
1970	0.463	1.913	0.422	19.919	8.444	0.650	0.787	4.236
1971	0.474	1.913	0.542	20.394	10.831	0.834	1.010	4.772
1972	0.486	1.913	0.661	20.879	13.229	1.019	1.234	5.312
1973	0.497	1.913	0.782	21.377	15.639	1.204	1.458	5.854
1974	0.509	1.913	0.903	21.886	18.061	1.391	1.684	6.400
1975	0.521	1.913	1.025	22.407	20.495	1.578	1.911	6.948
1976	0.534	1.913	1.147	22.941	22.941	1.766	2.139	7.499
TOTAL	3.9	17.2	5.9			9.2	11.1	47.3

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	2.544	0.217	24.686	4.334	0.334	0.665	3.760
1969	0.588	2.544	0.217	25.274	7.466	0.575	1.146	5.070
1970	0.602	2.544	0.531	25.876	10.612	0.817	1.629	6.123
1971	0.616	2.544	0.689	26.492	13.772	1.060	2.114	7.023
1972	0.631	2.544	0.847	27.123	16.947	1.305	2.601	7.929
1973	0.646	2.544	1.007	27.770	20.138	1.551	3.091	8.838
1974	0.661	2.544	1.167	28.431	23.343	1.797	3.583	9.753
1975	0.677	2.544	1.328	29.108	26.564	2.045	4.077	10.672
1976	0.693	2.544	1.490	29.802	29.802	2.295	4.574	11.596
TOTAL	5.1	22.9	7.5			11.8	23.5	70.8

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	0.385	0.109	5.256	2.175	0.167	0.236	0.898
1969	0.125	0.385	0.109	5.381	2.685	0.207	0.292	1.118
1970	0.128	0.385	0.160	5.509	3.199	0.246	0.348	1.267
1971	0.131	0.385	0.186	5.641	3.715	0.286	0.404	1.392
1972	0.134	0.385	0.212	5.775	4.235	0.326	0.460	1.517
1973	0.138	0.385	0.238	5.913	4.757	0.366	0.517	1.644
1974	0.141	0.385	0.264	6.053	5.283	0.407	0.574	1.771
1975	0.144	0.385	0.291	6.198	5.812	0.448	0.631	1.899
1976	0.148	0.385	0.317	6.345	6.345	0.489	0.689	2.028
TOTAL	1.1	3.5	1.9			2.9	4.2	13.5

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

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PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	10.351	0.853	99.876	17.065	1.314	1.634	14.152
1969	4.978	10.351	0.853	104.854	32.395	2.494	3.101	21.778
1970	5.226	10.351	2.399	110.080	47.972	3.694	4.593	26.263
1971	5.486	10.351	3.190	115.566	63.810	4.913	6.109	30.051
1972	5.760	10.351	3.996	121.326	79.921	6.154	7.652	33.913
1973	6.047	10.351	4.816	127.373	96.319	7.417	9.221	37.852
1974	6.348	10.351	5.651	133.722	113.019	8.702	10.820	41.873
1975	6.665	10.351	6.502	140.387	130.035	10.013	12.449	45.980
1976	6.997	10.351	7.369	147.384	147.384	11.349	14.110	50.176
TOTAL	47.5	93.2	35.6			56.0	69.7	302.0

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	13.048	0.988	124.143	19.762	1.522	2.002	17.559
1969	6.187	13.048	0.988	130.330	38.997	3.003	3.950	27.176
1970	6.496	13.048	2.927	136.826	58.540	4.508	5.930	32.908
1971	6.820	13.048	3.920	143.646	78.407	6.037	7.943	37.768
1972	7.159	13.048	4.931	150.805	98.615	7.593	9.990	42.721
1973	7.516	13.048	5.959	158.321	119.178	9.177	12.073	47.773
1974	7.891	13.048	7.006	166.212	140.117	10.789	14.194	52.928
1975	8.284	13.048	8.072	174.497	161.449	12.432	16.355	58.191
1976	8.697	13.048	9.160	183.194	183.194	14.106	18.558	63.568
TOTAL	59.1	117.4	44.0			69.2	91.0	380.6

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	7.649	0.718	75.559	14.363	1.106	1.271	10.745
1969	3.766	7.649	0.718	79.325	25.779	1.985	2.282	16.400
1970	3.954	7.649	1.869	83.279	37.382	2.878	3.309	19.659
1971	4.151	7.649	2.459	87.429	49.182	3.787	4.353	22.400
1972	4.358	7.649	3.059	91.787	61.189	4.712	5.416	25.194
1973	4.575	7.649	3.671	96.362	73.413	5.653	6.498	28.046
1974	4.803	7.649	4.293	101.164	85.865	6.612	7.600	30.957
1975	5.042	7.649	4.928	106.206	98.557	7.589	8.724	33.932
1976	5.293	7.649	5.575	111.500	111.500	8.585	9.869	36.973
TOTAL	35.9	68.8	27.3			42.9	49.3	224.3

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 35 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	7.322	1.104	80.661	22.082	1.700	2.199	12.325
1969	0.632	7.322	1.104	81.293	30.037	2.313	2.991	14.362
1970	0.637	7.322	1.900	81.930	37.996	2.926	3.783	16.568
1971	0.642	7.322	2.298	82.573	45.961	3.539	4.576	18.378
1972	0.647	7.322	2.697	83.220	53.930	4.153	5.370	20.188
1973	0.652	7.322	3.095	83.872	61.905	4.767	6.164	22.000
1974	0.657	7.322	3.494	84.529	69.885	5.381	6.958	23.813
1975	0.663	7.322	3.893	85.192	77.870	5.996	7.753	25.627
1976	0.668	7.322	4.293	85.860	85.860	6.611	8.549	27.443
TOTAL	5.2	65.9	23.9			37.4	48.3	180.7

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	9.478	1.212	100.064	24.238	1.866	2.583	15.139
1969	0.784	9.478	1.212	100.848	34.501	2.657	3.676	17.807
1970	0.790	9.478	2.238	101.639	44.769	3.447	4.771	20.725
1971	0.797	9.478	2.752	102.435	55.044	4.238	5.866	23.131
1972	0.803	9.478	3.266	103.238	65.325	5.030	6.961	25.539
1973	0.809	9.478	3.781	104.047	75.613	5.822	8.057	27.948
1974	0.816	9.478	4.295	104.863	85.907	6.615	9.154	30.358
1975	0.822	9.478	4.810	105.685	96.207	7.408	10.252	32.770
1976	0.828	9.478	5.326	106.513	106.513	8.202	11.350	35.184
TOTAL	6.4	85.3	28.9			45.3	62.7	228.6

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	3.322	0.904	44.656	18.082	1.392	1.508	7.126
1969	0.350	3.322	0.904	45.006	21.754	1.675	1.814	8.065
1970	0.353	3.322	1.271	45.359	25.428	1.958	2.121	9.024
1971	0.356	3.322	1.455	45.714	29.105	2.241	2.427	9.801
1972	0.358	3.322	1.639	46.073	32.785	2.524	2.734	10.578
1973	0.361	3.322	1.823	46.434	36.468	2.808	3.041	11.356
1974	0.364	3.322	2.008	46.798	40.154	3.092	3.349	12.134
1975	0.367	3.322	2.192	47.164	43.843	3.376	3.656	12.913
1976	0.370	3.322	2.377	47.534	47.534	3.660	3.964	13.692
TOTAL	2.9	29.9	14.6			22.7	24.6	94.7

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 36 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	9.957	1.690	113.466	33.806	2.603	3.480	17.731
1969	3.771	9.957	1.690	117.237	47.535	3.660	4.893	23.972
1970	3.896	9.957	3.069	121.134	61.389	4.727	6.319	27.970
1971	4.026	9.957	3.769	125.160	75.372	5.804	7.759	31.314
1972	4.160	9.957	4.474	129.319	89.490	6.891	9.212	34.694
1973	4.298	9.957	5.187	133.618	103.745	7.988	10.679	38.110
1974	4.441	9.957	5.907	138.058	118.144	9.097	12.161	41.564
1975	4.589	9.957	6.634	142.647	132.689	10.217	13.659	45.056
1976	4.741	9.957	7.369	147.388	147.388	11.349	15.172	48.589
TOTAL	33.9	89.6	39.8			62.3	83.3	309.0

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	11.735	1.779	129.464	35.584	2.740	3.878	20.133
1969	4.303	11.735	1.779	133.767	51.622	3.975	5.627	27.419
1970	4.446	11.735	3.390	138.213	67.803	5.221	7.390	32.182
1971	4.594	11.735	4.207	142.806	84.131	6.478	9.170	36.183
1972	4.746	11.735	5.031	147.553	100.613	7.747	10.966	40.225
1973	4.904	11.735	5.863	152.457	117.252	9.028	12.780	44.310
1974	5.067	11.735	6.703	157.524	134.054	10.322	14.611	48.438
1975	5.235	11.735	7.551	162.759	151.024	11.629	16.461	52.612
1976	5.409	11.735	8.408	168.169	168.169	12.949	18.330	56.832
TOTAL	38.7	105.6	44.7			70.1	99.2	358.3

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	4.145	1.400	61.155	27.994	2.156	2.853	10.554
1969	2.033	4.145	1.400	63.188	34.172	2.631	3.483	13.691
1970	2.100	4.145	2.021	65.288	40.417	3.112	4.119	15.498
1971	2.170	4.145	2.337	67.458	46.732	3.598	4.763	17.013
1972	2.242	4.145	2.656	69.700	53.119	4.090	5.414	18.547
1973	2.317	4.145	2.979	72.016	59.581	4.588	6.073	20.101
1974	2.394	4.145	3.306	74.410	66.119	5.091	6.739	21.675
1975	2.473	4.145	3.637	76.883	72.738	5.601	7.414	23.269
1976	2.555	4.145	3.972	79.438	79.438	6.117	8.096	24.885
TOTAL	18.3	37.3	23.7			37.0	49.0	165.2

TABLE

PROJECTED EXPENDITURES IN MILLIONS OF 1967 DOLLARS

S I C --> 37 <--

PROBABLE COST (MEDIAN EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	6.934	1.215	79.760	24.292	1.870	2.747	12.765
1969	1.472	6.934	1.215	81.232	32.697	2.518	3.697	15.835
1970	1.499	6.934	2.057	82.732	41.130	3.167	4.650	18.307
1971	1.527	6.934	2.480	84.259	49.591	3.818	5.607	20.366
1972	1.555	6.934	2.904	85.814	58.080	4.472	6.567	22.432
1973	1.584	6.934	3.330	87.398	66.597	5.128	7.530	24.505
1974	1.613	6.934	3.757	89.011	75.144	5.786	8.496	26.586
1975	1.643	6.934	4.186	90.654	83.720	6.446	9.466	28.675
1976	1.673	6.934	4.616	92.327	92.327	7.109	10.439	30.771
TOTAL	12.6	62.4	25.8			40.3	59.2	200.2

MAXIMUM COST (1968 EFFICIENCY)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	11.706	1.453	122.712	29.064	2.238	3.766	19.163
1969	2.265	11.706	1.453	124.977	43.035	3.314	5.576	24.314
1970	2.307	11.706	2.852	127.284	57.048	4.393	7.392	28.650
1971	2.349	11.706	3.555	129.633	71.103	5.475	9.214	32.299
1972	2.393	11.706	4.260	132.026	85.202	6.561	11.040	35.960
1973	2.437	11.706	4.967	134.463	99.345	7.650	12.873	39.633
1974	2.482	11.706	5.677	136.945	113.533	8.742	14.712	43.318
1975	2.528	11.706	6.388	139.473	127.767	9.838	16.556	47.016
1976	2.574	11.706	7.102	142.047	142.047	10.938	18.406	50.727
TOTAL	19.3	105.4	37.7			59.1	99.5	321.1

MINIMUM COST (MOST EFFICIENT REGION)

YEAR	GROWTH	NET INVESTMENT	REPLACEMENT	REQUIREMENT	CAPITALIZATION	INTEREST	OPERATIONS	CASH RQMTS
1968	0.0	3.471	1.041	48.595	20.829	1.604	2.043	8.159
1969	0.897	3.471	1.041	49.492	25.197	1.940	2.472	9.821
1970	0.914	3.471	1.479	50.405	29.581	2.278	2.902	11.043
1971	0.930	3.471	1.699	51.336	33.982	2.617	3.334	12.050
1972	0.948	3.471	1.920	52.283	38.400	2.957	3.767	13.062
1973	0.965	3.471	2.142	53.248	42.836	3.298	4.202	14.078
1974	0.983	3.471	2.364	54.231	47.290	3.641	4.639	15.098
1975	1.001	3.471	2.588	55.232	51.762	3.986	5.078	16.123
1976	1.019	3.471	2.813	56.252	56.252	4.331	5.518	17.152
TOTAL	7.7	31.2	17.1			26.7	34.0	116.6

POLLUTION INDEX: LOGIC AND METHOD

Indices

The assessment procedure described here is based on the use of a pollution index. An index is a dimensionless number that expresses a measure or estimate of the relative magnitude of some condition, in this case water pollution. Such an index is a shorthand expression for a complex combination of several factors. Its merit depends on its acceptability and utility--perhaps only as a reasonable compromise--based on consistent and careful method, rather than on any rigorous scientific justification. Each index should be carefully defined and computed so that it expresses the relevant condition as closely as practicable, but it must be understood that no single number can contain all the information about a complex situation.

Once defined, understood and accepted, indices can be quickly grasped and compared in cases where assimilating and comparing a whole complex set of data would be too time-consuming and confusing to be practical or useful. There will, of course, be many occasions on which the rough approximation represented by an index will not suffice; at such times only a detailed analysis of the basic data will satisfy the requirements or rigor.

Purpose

The problem assessment technique proposed here will produce comparative measures of:

1. the extent and relative severity of pollution;
2. the approximate causes or sources of the pollution; and
3. changes--in time, location, or degree--in either water pollution or its sources.

The technique has distinct limitations, however, and should not be construed to cover all aspects of program management.

In particular:

1. The technique does not account for unique or specialized situations. Water bodies that have particular value for aesthetic or other reasons do not carry particular weight in the index, all violations of legally established stream criteria being assumed equal except as modified by a quantifiable difference in duration and/or intensity;

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2. It does not include groundwaters, which are essentially different in characteristics and in the degree of available knowledge. Only surface waters should be subjected to these assessment techniques; and

3. It does not--and is not intended to--reflect purely regulatory violations. Only violations of legal water quality criteria, not the actions of dischargers, are intended inputs to the index calculation processes. So violations of law, regulation, or good practice that have no adverse impact on water quality can not be inferred from the problem assessment technique.

Overview

The material that follows presents the technique for assessing water pollution problems. The formulations will produce, through a two stage process: (a) a "pollution index" that quantifies stream pollution at a geographic level and (b) an allocation of the pollution index that quantifies, at each geographic level, the relative contributions to the pollution index of each source category (e.g., municipal, industrial, etc.). The basic unit of observation is termed a "pollution zone," defined as a stream reach consistently or recurrently out of compliance with one or more legal water quality criteria. The pollution index value computed for each zone, together with the relative contributions of each source category, can be aggregated to form pollution measures for rivers, river basins, sub-basins, or any other geographic area--up to and including the entire nation. Definitions of terms and formulations are presented in the next section, together with implementation guidelines.

The Pollution Index

Definition

A "pollution zone" is a continuous stretch of water in which one or more water quality criteria are violated over a consistent time period and at a consistent level of impact.

For each pollution zone, i, to be considered, define:

$$V_i = P_i D_i I_i$$

Where:

P_i = pollution prevalence, i.e., length in miles of the pollution zone
D_i = annual duration of pollution based on a 0-1 scale.
I_i = Intensity of pollution based on 0-1 scale addressing impacts on ecology, utility and aesthetics.

Evaluation of the three factors P_i, D_i, and I_i is discussed in more detail in the Implementation Guidelines section.

To produce a pollution index for any geographic area containing more than one pollution zone, calculate:

$$\frac{\sum_{i=1}^{r} V_i}{M}$$

Where:

M = total stream miles in the geographic area
r = number of pollution zones in the geographic area

The equation represents the aggregated water pollution index for the geographic area.

Implementation Guidelines

The following topics address, in the order in which their corresponding tasks would be performed, the implementation of the Pollution Index.

Measurement of Pollution Prevalence (P)

The process of identifying pollution zones is equivalent to quantifying P, as referred to in the preceding section. A pollution zone is a stream reach (identified by the upstream and downstream river mile points between which it lies) or other water area not consistently in compliance with legal criteria for water quality. The simple existence of a deviation from anycriterion represents, by definition, a prevailing pollution situation with a corresponding value of P. There either is or is not pollution in a legal sense. For purposes of defining P, the number of cirteria violated and the degree of violation are not important. (Violations of effluent or treatment regulations that do not create a violation of water quality criteria do not constitute pollution and do not establish a value of P. In-stream water quality is the only test applied. Statement of non-compliance should be verifiable by stream sampling.)

The end points or boundaries of a pollution zone are defined when:

1. Abutting waters are in compliance with water quality criteria or are not subject to them; or

2. there is a difference in the intensity or duration of pollution--e.g., a river is in violation of criteria from R.M. 60 to R.M. 40,

but, only summer pollution is involved, while from R.M. 40 to R.M. 0, pollution is year-round. We then have two distinct pollution zones, and similarly for differences in intensity.

A body of water is defined as being polluted if one or more water quality parameters do not comply on a consistent or recurrent basis with legal criteria established for its uses. In the absence of Federal, State or local government-established cirteria, the evaluator should make the following judgements: (a) desired stream uses; (b) appropriate criteria values; (c) compliance with assumed values, to arrive at a determination as to whether or not a pollution zone exists.

The size of a pollution zone (and thus P) is measured in terms of river miles; and for lakes, reservoirs, and coastal waters, P is measured in shoreline miles. To avoid double-counting in cases where a zone divides two geographic units of assessment, the PDI value for that zone should be divided equally between them.

Measurement of Pollution Duration (D)

The duration of a pollution situation is measured in terms of the number of quarter-year periods or seasons in which it occurs. Values are assigned to these observations as follows:

0.4 for violations occurring within 91 consecutive days.
0.6 for violations occurring within a period $\geq$ 92 consecutive days, but $<$ 183 consecutive days.
0.8 for violations occurring within a period $\geq$ 183 consecutive days, but $<$ 274 consecutive days.
1.0 for violations occurring in all four quarters within a period $>$ 274 consecutive days.

Measurement of Pollution Intensity (I)

Intensity of pollution is an indicator of the severity of pollution in a zone, expressed in terms of its effects rather than of water quality parameters. It permits the evaluator to avoid the process of explicitly forming judgments concerning the seriousness of each criterion deviation and to move directly to the question of impacts on human welfare and ecology.

Values of I range from 0 to 1 and represent the simple addition of the values assigned to three component measures which classify impacts according to ecological, utilitarian and aesthetic considerations. Ecological impacts include the effects of pollution on the existence or the potential for existence of desirable life forms, including man. Pollution effects causing reductions in the economic or resource utilization values of the water are grouped under utilitarian impacts. Lastly, pollution effects disagreeable to the senses are included in the category of aesthetics. The value scale for each of these components follows:

Ecological:
0.1 = Inhibiting or eliminating desirable life forms conditions that threaten stress of life forms (including sanitary aspects not related to any verifiable instances of contagions).

0.2 = conditions that produce stress on indigenous life forms.
0.3 = conditions that reduce productivity of indigenous life forms.
0.4 = conditions that inhibit normal life processes or threaten elimination of indigenous life forms.
0.5 = conditions that eliminate one or more indigenous life forms.

Utilitarian: Reducing the economic application of the water resource
0.1 = conditions that require costs above the norm to realize legally defined (i.e., in water quality standards) uses.
0.2 = conditions that intermittently inhibit realization of some desired and practical uses or necessitate use of an alternate source.
0.3 = conditions which frequently or continually prevent the realization of desired and practical uses or cause physical damage to facilities.

Aesthetic: Causing effects disagreeable to the senses
0.1 = visually unpleasant.
0.2 = visually unpleasant with association of unpleasant tastes or odors.

It is expected that the characteristics of many pollution situations will produce a set of effects falling into more than one of these components. Thus the diminution of commercially valuable marine life would be reflected in both the ecological and utilitarian categories of effects. On the other hand the evaluator should guard against over-zealousness. For example, a pollution situation may have serious ecological impacts, but have virtually no impact on the economic or utilitarian value of the waters, because circumstances of location, climate, hydrology or other factors remove these values from consideration.

Assignment of PDI values should be a team effort, involving all staff members familiar with: (a) legally-established water quality criteria and uses, (b) water quality data, (c) local ecological patterns, and (d) local water use patterns. It is strongly suggested that staff biologists provide substantial input-particularly to assignment of I values relating to ecology. Efforts should be devoted to developing unanimity with respect to water quality conditions in a fashion that accurately reflects those conditions as they physically exist, without regard to regulatory requirements or the behavior of waste discharges.

The form shown in Figure 1 is proposed as the basic tool for calculating the pollution index for any geographic area. Each pollution zone (defined as a stretch of water out of compliance with an established water-quality criterion) occupies one line. Pollution zones should be established of such length that the values of intensity (I) and duration (D) are judged to be consistent throughout each zone. In a case where

FIGURE 1

POLLUTION INDEX CALCULATION FORMAT

Geographic Unit of Assessment:

Region _____

State _____

STORET Basin _____

Other _____

Region _____

Date _____

Stream	Pollution Zone		M	P	D	I_E	I_U	I_A	I	PDI	Comments
	U/S R.M.	D/S R.M.									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)

Pollution Index = $\frac{PDI}{M}$ = _____ =

=

the intensity (I) is judged to have different values in different seasons of the year, a separate line should be used for each value of I.

The column entries are as follows:

1. Stream: Name of stream or other body of water.

2. Upstream River Mile: The river-mile station of the upstream endpoint of the pollution zone.

3. Downstream River Mile: The river-mile station of the downstream endpoint of the pollution zone.

4. Miles: The total length of the stream in miles. This entry is made only once for each stream, not for every pollution zone in a stream.

5. Prevalence: Column 2 minus column 3. The length of the pollution zone in miles.

6. Duration: This entry may never have a value greater than 1.0 for any reach, and is more heavily weighted for pollution (0.4 for one season) than for non-pollution. Therefore, when different values of I are assigned to different seasons of the year, the largest value of I should be assigned the appropriate value of D, specified in the measurement of pollution duration section. The value of D for other lines referring to the same reach are determined by subtracting this value of D from 1.0.

7. Ecological Impact: Defined in measurement of Pollution Intensity (I) Section.

8. Utilitarian Impact: Defined in Measurement of Pollution Intensity (I) Section.

9. Aesthetic Impact: Defined in Measurement of Pollution Intensity (I) Section.

10 Intensity: Columns 7 plus 8 plus 9.

11. V = PDI: Columns 5 times 6 times 10.

The water pollution index for any river basin, or other geographic area of assessment, is calculated by summing the PDI values for the pollution zones included and dividing this sum by the sum of the river miles in the stream or area being assessed.

Pollution Allocation to Source Categories

Implementation Guidelines

The pollution source allocation is intended to produce a picture of the relative contributions of various activities that are pollution sources (note that not all activities or waste discharges necessarily result in pollution, as defined) to the situation reflected in the index. Previous efforts to establish such a ranking were hindered by a lack of correspondence of source contributions with geographically unique indicators of the resulting stream pollution and its effects. In addition to offering progress to the goal of associating discharges with pollution impacts, the present approach provides a means of unambiguously aggregating measures of source constributions to meet higher level planning information needs.

Classification of Pollution Sources

To ensure comparability, the following categories of pollution sources should be used:

(a) Municipal Wastes (included "other urban" wastes)
(b) Industrial and Power Plant Wastes
(c) Federal Installations
(d) Agricultural and Rural Wastes
(e) Mining Wastes
(f) Water Resource Development
(g) Transportation

This classification may differ from others designed to meet the specific needs of various regions, but only in degree of detail. In such cases, as desired, subsets of these categories may be utilized, to any desirable degree of detail. However, the evaluator must ensure consistency in aggregating to the above categories for national reporting purposes. (The category, "Spills of Oil and Hazardous Materials," is not included here because spills are not a source of pollution in the normal sense, but rather a probabilistic problem which, by definition, does not occur on a continuing or recurring basis.)

Estimation of Pollution Contribution

The allocation of V_i (the PDI value for a given reach) among the responsible categories of pollution sources is achieved by first noting an estimate of the proportion of total pollution accounted for by each source category and then multiplying each value by V_i. Figure 2 is the worksheet to be used for arriving at source contributions.

To account for upstream sources lying outside the pollution zone in question but contributing to its noncompliance, it is essential that

FIGURE 2

POLLUTION SOURCE ALLOCATION CALCULATION FORMAT

Geographic Unit Of Assessment:

Region _____

State _____

STORET Basin _____

Other _____

Region _____

Date _____

Pollution Zone Location					Relative Contribution by Source to PDI							Comment, Identification
	Reach-River Miles											
Stream	U/S (2)		D/S (3)	PDI (4)	Mun. (5)	Ind. (6)	Fed. Inst. (7)	Agri. (8)	Mining (9)	WRD (10)	Trans. (11)	
Totals				=	=	=	=	=	=	=	=	
Relative Contribution				%	%	%	%	%	%	%	%	

the "total pollution" concept, which serves as a base for estimating source contributions, focus on the volume of pollutants in the water relative to assimilative capacity rather than just the volume of discharges occurring within the zone. This may often result in a source category being assigned a significant share of the stream pollution when no sources of the type are located within the zone itself. In cases where waters entering the zone are of high quality, the two volumes will of course be identical.

Aggregation

The method of deriving source contributions within any geographic unit of assessment from zone contribution estimates is inherent in the worksheet (Figure 2). Summing of sub-totals will produce aggregated values of source contributions at any desired level.

The source allocation is, of course, a derivative of the pollution index. The sum of the pollution source contributions in any pollution zone equals the PDI of that pollution zone. Wherever possible, specific sources associated with a pollution zone should be identified in the "comment" column (perhaps by note reference to an associated table of sources). Development of the pollution source allocation requires that a working inventory of sources be developed progressively over time. And while a substantial portion of the allocation will, of necessity, always be a matter of judgment, wherever possible allocations should be based on simulation models, calculated assimilation of dilution rates, consideration of gross quantities of material and materials balance calculations, and other quantitative analytical techniques. As with the pollution index, we are not concerned here with breaches of regulations, but with the existence of pollution in water and what causes it.

Calculation follows the procedure suggested in Figure 2. PDI multiplied by percent relative contribution in each source category (the sum of columns 5 through 11 = 100%) provides the set of columnar values that equal PDI for each line, or pollution zone.

Summation of a column divided by the sum of PDI values provides the relative contribution of sources for any geographic area or set of pollution zones, up to and including the nation.

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SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
QUINNIPIAC RIVER & WESTERN CONN COASTAL												
101	I	0.18	100.	66.0	365.	48.0 72.7%	6.0 9.1%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	12.0 18.2%
HOUSATONIC RIVER												
102	I	0.16	183.	144.0	899.	37.0 25.7%	107.0 74.3%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
PAWCATUCK RIVER & EASTERN CONN COASTAL												
103	I	0.09	144.	82.0	866.	58.0 70.7%	13.0 15.9%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	11.0 13.4%
CONNECTICUT RIVER												
104	I	0.12	1108.	522.0	4227.	285.0 54.6%	207.0 39.7%	0.0 0.0%	0.0 0.0%	0.0 0.0%	30.0 5.7%	0.0 0.0%
THAMES RIVER												
105	I	0.11	144.	70.0	652.	39.0 55.7%	28.0 40.0%	3.0 4.3%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
NARRAGANSETT BAY												
106	I	0.26	241.	171.0	660.	113.0 66.1%	56.0 32.7%	0.0 0.0%	0.0 0.0%	1.0 0.6%	0.0 0.0%	1.0 0.6%
MASSACHUSETTS COASTAL												
108	I	0.12	437.	275.0	2260.	253.0 92.0%	18.0 6.5%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	4.0 1.5%
MERRIMACK RIVER												
109	I	0.20	451.	354.0	1749.	195.0 55.1%	157.0 44.4%	0.0 0.0%	0.0 0.0%	0.0 0.0%	2.0 0.6%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
PISCATAQUA RIVER & NEW HAMPSHIRE COASTAL												
110	I	0.24	146.	117.0	481.	71.0	41.0	0.0	0.0	0.0	0.0	5.0
						60.7%	35.0%	0.0%	0.0%	0.0%	0.0%	4.3%
SACO RIVER AND SOUTH MAINE COASTAL												
112	I	0.06	136.	83.0	1370.	47.0	36.0	0.0	0.0	0.0	0.0	0.0
						56.6%	43.4%	0.0%	0.0%	0.0%	0.0%	0.0%
PRESUMPSCOT RIVER AND CASCO BAY												
114	I	0.05	71.	40.0	750.	25.0	15.0	0.0	0.0	0.0	0.0	0.0
						62.5%	37.5%	0.0%	0.0%	0.0%	0.0%	0.0%
ANDROSCOGGIN RIVER												
115	I	0.08	127.	101.0	1220.	22.0	79.0	0.0	0.0	0.0	0.0	0.0
						21.8%	78.2%	0.0%	0.0%	0.0%	0.0%	0.0%
KENNEBEC AND SHEEPSCOT RIVERS												
116	I	0.07	207.	168.0	2440.	24.0	138.0	6.0	0.0	0.0	0.0	0.0
						14.3%	82.1%	3.6%	0.0%	0.0%	0.0%	0.0%
PENOBSCOT RIVER												
117	I	0.04	120.	109.0	2860.	18.0	91.0	0.0	0.0	0.0	0.0	0.0
						16.5%	83.5%	0.0%	0.0%	0.0%	0.0%	0.0%
NORTH MAINE COASTAL												
118	I	0.05	365.	194.0	3790.	145.0	49.0	0.0	0.0	0.0	0.0	0.0
						74.7%	25.3%	0.0%	0.0%	0.0%	0.0%	0.0%
ST. CROIX RIVER												
119	I	0.01	15.	11.0	780.	2.0	9.0	0.0	0.0	0.0	0.0	0.0
						18.2%	81.8%	0.0%	0.0%	0.0%	0.0%	0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
ST. JOHNS RIVER												
120	I	0.05	148.	122.0	2290.	14.0 11.5%	104.0 85.2%	4.0 3.3%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
LAKE MEMPHREMAGOG												
121	I	0.13	44.	26.0	204.	23.0 88.5%	1.0 3.8%	0.0 0.0%	2.0 7.7%	0.0 0.0%	0.0 0.0%	0.0 0.0%
LAKE CHAMPLAIN												
124	I	0.21	626.	348.2	1664.	244.6 70.2%	83.6 24.0%	0.0 0.0%	11.0 3.2%	9.0 2.6%	0.0 0.0%	0.0 0.0%
UPPER HUDSON RIVER												
131	I	0.18	47.	31.0	174.	18.0 58.1%	13.0 41.9%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
MIDDLE HUDSON RIVER												
132	I	0.0	0.	0.0	0.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
SUMMARY FOR												
REGION	I	0.10	4860.	3034.2	29701.	1681.6 55.4%	1251.6 41.2%	13.0 0.4%	13.0 0.4%	10.0 0.3%	32.0 1.1%	33.0 1.1%

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HOUSATONIC RIVER												
102	II	0.0	0.	0.0	0.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
LAKE CHAMPLAIN												
124	II	0.03	5.	4.0	157.	1.0 25.0%	3.0 75.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
ST. LAWRENCE RIVER												
125	II	0.14	213.	60.3	417.	23.6 39.1%	28.9 47.9%	0.0 0.0%	3.0 5.0%	1.8 3.0%	1.2 2.0%	1.8 3.0%
LAKE ONTARIO												
126	II	0.46	175.	83.6	181.	31.0 37.1%	42.7 51.1%	0.8 1.0%	7.5 9.0%	0.0 0.0%	0.8 1.0%	0.8 1.0%
NIAGARA RIVER												
127	II	0.40	37.	15.3	38.	7.8 51.0%	7.2 47.1%	0.0 0.0%	0.2 1.3%	0.0 0.0%	0.0 0.0%	0.1 0.7%
GENESEE RIVER												
128	II	0.09	67.	13.1	150.	6.3 48.1%	4.6 35.1%	0.0 0.0%	1.4 10.7%	0.4 3.1%	0.1 0.8%	0.3 2.3%
OSWEGO RIVER												
129	II	0.21	105.	50.6	245.	19.3 38.1%	17.7 35.0%	0.0 0.0%	9.6 19.0%	0.0 0.0%	2.0 4.0%	2.0 4.0%
MOHAWK RIVER												
130	II	0.30	75.	36.9	125.	22.5 61.0%	11.0 29.8%	0.0 0.0%	1.7 4.6%	0.0 0.0%	0.0 0.0%	1.7 4.6%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
UPPER HUDSON RIVER												
131	II	0.08	37.	23.1	292.	9.2 39.8%	13.9 60.2%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
MIDDLE HUDSON RIVER												
132	II	0.04	24.	6.6	185.	2.9 43.9%	2.9 43.9%	0.3 4.5%	0.2 3.0%	0.0 0.0%	0.3 4.5%	0.0 0.0%
LOWER HUDSON-NEW YORK METROPOLITAN AREA												
133	II	0.36	443.	286.7	792.	127.3 44.4%	137.4 47.9%	0.0 0.0%	7.4 2.6%	0.0 0.0%	4.2 1.5%	10.4 3.6%
NEW JERSEY COAST												
134	II	0.15	196.	52.2	355.	52.2 100.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
LAKE ERIE SHORE & MINOR TRIBUTARIES												
135	II	0.45	179.	130.9	294.	69.2 52.9%	44.4 33.9%	0.0 0.0%	17.3 13.2%	0.0 0.0%	0.0 0.0%	0.0 0.0%
LAKE ONTARIO SHORE - GENESSEE R-OSWEGO R												
136	II	0.13	53.	6.9	53.	4.6 66.7%	1.9 27.5%	0.0 0.0%	0.2 2.9%	0.0 0.0%	0.0 0.0%	0.2 2.9%
LAKE ONTARIO SHORE - NIAGARA R TO GENESSEE R												
137	II	0.18	114.	32.7	178.	12.1 37.0%	14.4 44.0%	0.0 0.0%	3.3 10.1%	0.0 0.0%	0.3 0.9%	2.6 8.0%
ST REGIS RIVER												
138	II	0.0	0.	0.0	94.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
DELAWARE RIVER-ZONE 1												
203	II	0.03	28.	9.0	272.	7.2	1.8	0.0	0.0	0.0	0.0	0.0
						80.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%
DELAWARE RIVER-ZONE 2												
206	II	0.20	5.	2.6	13.	1.8	0.8	0.0	0.0	0.0	0.0	0.0
						69.2%	30.8%	0.0%	0.0%	0.0%	0.0%	0.0%
DELAWARE RIVER-ZONE 3												
207	II	0.64	15.	10.8	17.	7.0	3.2	0.0	0.0	0.0	0.0	0.6
						64.8%	29.6%	0.0%	0.0%	0.0%	0.0%	5.6%
DELAWARE RIVER-ZONE 4												
208	II	0.06	5.	2.2	39.	1.2	0.9	0.0	0.0	0.0	0.0	0.1
						54.5%	40.9%	0.0%	0.0%	0.0%	0.0%	4.5%
SUSQUEHANNA RIVER												
212	II	0.12	226.	95.2	804.	76.6	10.7	0.0	7.9	0.0	0.0	0.0
						80.5%	11.2%	0.0%	8.3%	0.0%	0.0%	0.0%
ALLEGHENY RIVER												
501	II	0.09	69.	17.6	188.	11.0	4.1	0.0	0.0	2.5	0.0	0.0
						62.5%	23.3%	0.0%	0.0%	14.2%	0.0%	0.0%
SUMMARY FOR												
REGION	2	0.19	2071.	940.3	4889.	493.8	351.5	1.1	59.7	4.7	8.9	20.6
						52.5%	37.4%	0.1%	6.3%	0.5%	0.9%	2.2%

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SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
DELAWARE RIVER-ZONE 1												
203	III	0.04	13.	4.8	128.	3.8 79.2%	1.0 20.8%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
DELAWARE RIVER-LEHIGH												
204	III	0.08	20.	4.8	60.	1.9 39.6%	1.2 25.0%	0.0 0.0%	0.3 6.3%	1.4 29.2%	0.0 0.0%	0.0 0.0%
DELAWARE RIVER-SCHUYLKILL												
205	III	0.38	70.	50.0	130.	9.5 19.0%	9.0 18.0%	0.0 0.0%	1.0 2.0%	28.5 57.0%	0.0 0.0%	2.0 4.0%
DELAWARE RIVER-ZONE 2												
206	III	0.21	6.	2.7	13.	1.9 70.4%	0.8 29.6%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
DELAWARE RIVER-ZONE 3												
207	III	0.60	15.	10.8	18.	7.0 64.8%	3.3 30.6%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.5 4.6%
DELAWARE RIVER-ZONE 4												
208	III	0.05	6.	2.2	40.	1.2 54.5%	0.9 40.9%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.1 4.5%
SUSQUEHANNA RIVER												
212	III	0.19	1137.	668.6	3462.	148.6 22.2%	65.0 9.7%	2.0 0.3%	11.0 1.6%	442.0 66.1%	0.0 0.0%	0.0 0.0%
UPPER CHESAPEAKE BAY & MD-DEL CST DEL-MARVA												
213	III	0.07	400.	179.8	2554.	105.0 58.4%	62.2 34.6%	5.7 3.2%	6.9 3.8%	0.0 0.0%	0.0 0.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
POTOMAC RIVER												
214	III	0.13	1066.	454.0	3400.	192.8 42.5%	117.1 25.8%	2.8 0.6%	19.5 4.3%	121.8 26.8%	0.0 0.0%	0.0 0.0%
RAPPAHANNOCK AND YORK RIVERS-VIRGINIA COAST												
215	III	0.02	119.	34.6	1555.	11.4 32.9%	13.1 37.9%	0.2 0.6%	0.3 0.9%	0.0 0.0%	0.0 0.0%	9.6 27.7%
JAMES RIVER												
216	III	0.08	320.	152.6	1990.	46.8 30.7%	99.0 64.9%	4.9 3.2%	1.0 0.7%	0.0 0.0%	0.0 0.0%	0.9 0.6%
CHOWAN RIVER												
301	III	0.01	51.	14.5	1158.	7.1 49.0%	7.4 51.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
ROANOKE RIVER												
302	III	0.07	191.	83.3	1143.	38.0 45.6%	41.1 49.3%	0.0 0.0%	0.0 0.0%	0.0 0.0%	4.2 5.0%	0.0 0.0%
NORTH CAROLINA COASTAL AREA												
305	III	0.0	0.	0.0	0.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
YADKIN-PEE DEE-LOWER PEE DEE RIVER												
307	III	0.0	0.	0.0	10.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
CLINCH RIVER												
401	III	0.03	9.	5.0	150.	0.5 10.0%	0.0 0.0%	0.0 0.0%	0.1 2.0%	0.0 0.0%	4.4 88.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
HOLSTON RIVER												
402	III	0.73	77.	62.0	85.	0.0 0.0%	62.0 100.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
ALLEGHENY RIVER												
501	III	0.32	879.	557.5	1730.	129.0 23.1%	48.3 8.7%	0.0 0.0%	1.3 0.2%	378.3 67.9%	0.0 0.0%	0.6 0.1%
MONONGAHELA RIVER												
502	III	0.55	1608.	1107.1	2025.	181.8 16.4%	61.3 5.5%	0.0 0.0%	5.2 0.5%	843.4 76.2%	10.0 0.9%	5.4 0.5%
BEAVER RIVER												
503	III	0.51	267.	174.3	340.	83.8 48.1%	55.9 32.1%	0.0 0.0%	1.5 0.9%	31.2 17.9%	1.9 1.1%	0.0 0.0%
LITTLE KANAWHA RIVER												
505	III	0.19	178.	76.2	409.	21.7 28.5%	17.0 22.3%	0.0 0.0%	23.3 30.6%	14.2 18.6%	0.0 0.0%	0.0 0.0%
KANAWHA RIVER												
507	III	0.20	880.	465.1	2378.	106.3 22.9%	130.3 28.0%	0.0 0.0%	3.5 0.8%	209.2 45.0%	7.2 1.5%	8.6 1.8%
GUYANDOT RIVER												
508	III	0.75	315.	241.8	324.	64.6 26.7%	19.4 8.0%	0.0 0.0%	29.4 12.2%	128.4 53.1%	0.0 0.0%	0.0 0.0%
BIG SANDY RIVER												
509	III	0.64	364.	267.2	417.	74.6 27.9%	14.9 5.6%	0.0 0.0%	1.5 0.6%	176.2 65.9%	0.0 0.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	POI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
OHIO RIVER MAIN STEM & MINOR TRIBUTARIES												
521	III	0.33	405.	228.3	692.	68.7 30.1%	46.7 20.5%	0.0 0.0%	25.5 11.2%	73.8 32.3%	4.5 2.0%	9.1 4.0%
LK ERIE SHORE-CUYAHOGA R TO N Y ST LINE												
606	III	0.40	41.	40.3	100.	20.1 49.9%	18.2 45.2%	0.0 0.0%	2.0 5.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
SUMMARY FOR												
REGION	3	0.20	8437.	4887.5	24311.	1326.1 27.1%	895.1 18.3%	15.6 0.3%	133.3 2.7%	2448.4 50.1%	32.2 0.7%	36.8 0.8%

S U M M A R Y

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SUB-BASIN	REG	INDEX	P	PUI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
CHOWAN RIVER												
301	IV	0.03	53.	18.7	602.	1.6 8.6%	17.1 91.4%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
ROANOKE RIVER												
302	IV	0.07	83.	51.1	770.	13.3 26.0%	36.8 72.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	1.0 2.0%	0.0 0.0%
TAR RIVER												
303	IV	0.02	84.	25.2	1322.	23.1 91.7%	0.0 0.0%	0.0 0.0%	2.1 8.3%	0.0 0.0%	0.0 0.0%	0.0 0.0%
NEUSE RIVER												
304	IV	0.09	265.	121.2	1357.	91.4 75.4%	23.3 19.2%	6.5 5.4%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
NORTH CAROLINA COASTAL AREA												
305	IV	0.01	19.	6.4	499.	5.9 92.2%	0.0 0.0%	0.3 4.7%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.2 3.1%
CAPE FEAR RIVER												
306	IV	0.09	451.	188.0	2168.	107.0 56.9%	77.2 41.1%	0.0 0.0%	3.8 2.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
YADKIN-PEE DEE-LOWER PEE DEE RIVER												
307	IV	0.06	500.	204.9	3240.	92.3 45.0%	98.5 48.1%	5.4 2.6%	8.3 4.1%	0.0 0.0%	0.0 0.0%	0.4 0.2%
CATAWBA-WATEREE,CONGAREE,SANTEE-COOPER RS												
308	IV	0.08	624.	341.3	4517.	197.4 57.8%	126.9 37.2%	3.1 0.9%	1.3 0.4%	0.0 0.0%	9.5 2.8%	3.1 0.9%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
EDISTO-COMBAHEE RIVER												
309	IV	0.01	38.	16.0	1363.	4.5 28.1%	11.5 71.9%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
SAVANNAH RIVER												
313	IV	0.49	222.	147.0	300.	48.5 33.0%	83.8 57.0%	0.0 0.0%	14.7 10.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
OGEECHEE RIVER												
314	IV	0.0	0.	0.0	245.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
OCOMEE RIVER												
315	IV	0.03	15.	9.0	265.	6.0 66.7%	2.0 22.2%	0.0 0.0%	1.0 11.1%	0.0 0.0%	0.0 0.0%	0.0 0.0%
OCOMULGEE RIVER												
316	IV	0.22	98.	71.0	327.	42.6 60.0%	23.4 33.0%	0.0 0.0%	3.6 5.1%	1.4 2.0%	0.0 0.0%	0.0 0.0%
ALTAMAHA RIVER												
317	IV	0.22	37.	33.0	147.	18.1 54.8%	12.9 39.1%	0.0 0.0%	2.0 6.1%	0.0 0.0%	0.0 0.0%	0.0 0.0%
SATILLA RIVER												
318	IV	0.03	13.	8.0	260.	4.0 50.0%	3.0 37.5%	0.0 0.0%	1.0 12.5%	0.0 0.0%	0.0 0.0%	0.0 0.0%
ST. MARYS-NASSAU RIVER												
319	IV	0.36	40.	40.0	110.	10.0 25.0%	30.0 75.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
ST. JOHNS RIVER												
320	IV	0.53	185.	148.0	280.	88.8 60.0%	28.1 19.0%	1.5 1.0%	29.6 20.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
SUWANNEE RIVER												
321	IV	0.12	67.	40.0	336.	19.2 48.0%	8.0 20.0%	0.0 0.0%	12.8 32.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
OCHLOCKONEE-ST. MARKS RIVER												
322	IV	0.09	25.	18.0	210.	11.0 61.1%	3.0 16.7%	0.0 0.0%	4.0 22.2%	0.0 0.0%	0.0 0.0%	0.0 0.0%
WITHLACOOCHEE RIVER												
323	IV	0.07	15.	7.0	100.	0.1 1.4%	4.7 67.1%	0.0 0.0%	0.1 1.4%	0.0 0.0%	2.1 30.0%	0.0 0.0%
TAMPA BAY AREA												
324	IV	0.66	188.	182.0	275.	67.3 37.0%	78.3 43.0%	0.0 0.0%	0.0 0.0%	34.6 19.0%	0.0 0.0%	1.8 1.0%
PEACE RIVER												
325	IV	0.46	150.	94.0	206.	31.0 33.0%	1.9 2.0%	0.0 0.0%	2.8 3.0%	56.4 60.0%	0.0 0.0%	1.9 2.0%
KISSIMMEE RIVER												
326	IV	0.38	50.	45.0	120.	22.5 50.0%	0.0 0.0%	0.0 0.0%	11.2 24.9%	11.3 25.1%	0.0 0.0%	0.0 0.0%
FLORIDA EAST COASTAL AREA												
327	IV	0.16	50.	40.0	250.	25.2 63.0%	10.0 25.0%	2.0 5.0%	0.0 0.0%	0.0 0.0%	0.8 2.0%	2.0 5.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
LOWER FLORIDA AREA												
328	IV	0.63	1220.	834.0	1320.	392.0 47.0%	75.1 9.0%	0.0 0.0%	350.3 42.0%	8.3 1.0%	0.0 0.0%	8.3 1.0%
FLINT RIVER												
329	IV	0.05	20.	16.0	350.	9.0 56.3%	6.1 38.1%	0.0 0.0%	0.9 5.6%	0.0 0.0%	0.0 0.0%	0.0 0.0%
CHATTACHOOCHEE RIVER												
330	IV	0.44	195.	164.0	375.	144.3 88.0%	18.0 11.0%	0.0 0.0%	1.7 1.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
APALACHICOLA RIVER												
331	IV	0.30	57.	34.0	113.	23.8 70.0%	8.2 24.1%	0.0 0.0%	2.0 5.9%	0.0 0.0%	0.0 0.0%	0.0 0.0%
CHOCTAWHATCHEE RIVER												
332	IV	0.06	51.	36.0	595.	19.1 53.1%	15.8 43.9%	0.0 0.0%	1.1 3.1%	0.0 0.0%	0.0 0.0%	0.0 0.0%
PERDIDO-ESCAMBIA RIVER												
333	IV	0.58	200.	268.0	460.	109.9 41.0%	147.4 55.0%	0.0 0.0%	10.7 4.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
TALLAPOOSA RIVER												
334	IV	0.05	37.	13.0	245.	7.0 53.8%	4.9 37.7%	0.0 0.0%	1.1 8.5%	0.0 0.0%	0.0 0.0%	0.0 0.0%
COOSA RIVER												
335	IV	0.04	20	14.0	386.	5.0 35.7%	7.0 50.0%	1.0 7.1%	1.0 7.1%	0.0 0.0%	0.0 0.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
CAHABA RIVER												
336	IV	0.01	8.	2.0	152.	1.5 75.0%	0.5 25.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
ALABAMA RIVER												
337	IV	0.07	31.	22.0	310.	7.0 31.8%	12.1 55.0%	1.1 5.0%	1.8 8.2%	0.0 0.0%	0.0 0.0%	0.0 0.0%
UPPER TOMBIGBEE RIVER												
338	IV	0.33	50.	40.0	120.	14.8 37.0%	15.6 39.0%	0.0 0.0%	2.4 6.0%	2.4 6.0%	2.4 6.0%	2.4 6.0%
WARRIOR RIVER												
339	IV	0.28	105.	84.0	302.	29.4 35.0%	37.8 45.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	16.8 20.0%	0.0 0.0%
LOWER TOMBIGEE RIVER												
340	IV	0.59	146.	102.0	172.	10.2 10.0%	88.7 87.0%	0.0 0.0%	3.1 3.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
MOBILE BAY AREA												
341	IV	0.43	150.	105.0	245.	52.5 50.0%	52.5 50.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
PASACAGOULA RIVER												
342	IV	0.24	130.	105.0	435.	23.1 22.0%	52.5 50.0%	0.0 0.0%	8.4 8.0%	8.4 8.0%	8.4 8.0%	4.2 4.0%
PEARL RIVER												
343	IV	0.28	125.	100.0	353.	28.0 28.0%	51.0 51.0%	0.0 0.0%	12.0 12.0%	3.0 3.0%	3.0 3.0%	3.0 3.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
CLINCH RIVER												
401	IV	0.04	17.	8.0	200.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	8.0 100.0%	0.0 0.0%
HOLSTON RIVER												
402	IV	0.55	136.	80.0	146.	4.0 5.0%	40.0 50.0%	13.6 17.0%	0.0 0.0%	0.0 0.0%	22.4 28.0%	0.0 0.0%
FRENCH BROAD RIVER												
403	IV	0.39	142.	84.0	218.	39.5 47.0%	21.8 26.0%	0.0 0.0%	8.4 10.0%	0.0 0.0%	14.3 17.0%	0.0 0.0%
LITTLE TENNESSEE RIVER												
404	IV	0.21	58.	41.0	195.	8.2 20.0%	28.7 70.0%	0.0 0.0%	1.2 2.9%	0.0 0.0%	2.9 7.1%	0.0 0.0%
HIWASSEE RIVER												
405	IV	0.29	63.	55.0	191.	0.0 0.0%	51.2 93.1%	0.0 0.0%	0.0 0.0%	0.0 0.0%	3.8 6.9%	0.0 0.0%
ELK RIVER												
406	IV	0.03	12.	7.0	200.	5.6 80.0%	0.0 0.0%	0.0 0.0%	1.4 20.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
DUCK RIVER												
407	IV	0.03	25.	9.0	300.	4.0 44.4%	5.0 55.6%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
TENNESSEE RIVER-MAIN STEM & MINOR TRIB												
408	IV	0.23	226.	149.0	652.	46.2 31.0%	82.0 55.0%	0.0 0.0%	3.0 2.0%	0.0 0.0%	17.8 11.9%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
KANAWHA RIVER												
507	IV	0.0	0.	0.0	0.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
BIG SANDY RIVER												
509	IV	0.49	335.	213.8	437.	61.5 28.8%	8.6 4.0%	0.0 0.0%	2.0 0.9%	141.7 66.3%	0.0 0.0%	0.0 0.0%
LICKING RIVER												
512	IV	0.27	748.	204.1	748.	153.7 75.3%	1.4 0.7%	0.0 0.0%	48.9 24.0%	0.1 0.0%	0.0 0.0%	0.0 0.0%
KENTUCKY RIVER												
514	IV	0.20	1257.	246.2	1257.	154.2 62.6%	0.8 0.3%	0.0 0.0%	39.3 16.0%	51.9 21.1%	0.0 0.0%	0.0 0.0%
SALT RIVER												
515	IV	0.34	581.	196.1	581.	105.5 53.8%	31.9 16.3%	2.1 1.1%	56.6 28.9%	0.0 0.0%	0.0 0.0%	0.0 0.0%
GREEN RIVER												
516	IV	0.33	1366.	455.0	1366.	232.3 51.1%	3.0 0.7%	0.0 0.0%	56.8 12.5%	104.4 22.9%	58.5 12.9%	0.0 0.0%
CUMBERLAND RIVER												
520	IV	0.27	3039.	822.5	3049.	387.2 47.1%	150.3 18.3%	11.1 1.3%	128.0 15.6%	93.3 11.3%	16.0 1.9%	36.6 4.4%
OHIO RIVER MAIN STEM & MINOR TRIBUTARIES												
521	IV	0.33	594.	274.5	825.	125.1 45.6%	33.8 12.3%	0.0 0.0%	67.6 24.6%	45.4 16.5%	0.9 0.3%	1.7 0.6%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
L MISS R--CAIRO TO HELENA ARK												
1006	IV	0.06	220.	75.1	1160.	23.3	48.0	0.8	0.7	0.0	2.3	0.0
						31.0%	63.9%	1.1%	0.9%	0.0%	3.1%	0.0%
LOWER MISSISSIPPI RIVER-YAZOO RIVER												
1011	IV	0.02	181.	38.5	1672.	13.4	20.8	0.0	1.9	0.0	1.2	1.2
						34.8%	54.0%	0.0%	4.9%	0.0%	3.1%	3.1%
LOWER MISSISSIPPI RIVER--BIG BLACK RIVER												
1018	IV	0.0	10.	0.4	436.	0.2	0.0	0.0	0.0	0.2	0.0	0.0
						50.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%
LOWER MISSISSIPPI RIVER-NATCHEZ TO GULF												
1021	IV	0.01	13.	2.8	290.	0.8	0.4	0.1	1.2	0.1	0.1	0.1
						28.6%	14.3%	3.6%	42.9%	3.6%	3.6%	3.6%
SUMMARY FOR												
REGION	4	0.17	14840.	6755.8	39125.	3172.1	1801.3	48.6	911.8	562.9	192.2	66.9
						47.0%	26.7%	0.7%	13.5%	8.3%	2.8%	1.0%

SUMMARY

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SUB-BASIN	REG	INDEX	P	PoI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
BEAVER RIVER												
503	V	0.28	160.	82.0	294.	37.9 46.2%	37.9 46.2%	2.9 3.5%	0.0 0.0%	0.0 0.0%	3.3 4.0%	0.0 0.0%
MUSKINGUM RIVER												
504	V	0.40	1323.	664.1	1662.	281.2 42.3%	160.1 24.1%	0.3 0.0%	47.3 7.1%	173.9 26.2%	1.3 0.2%	0.0 0.0%
HOCKING RIVER												
506	V	0.62	238.	161.6	261.	50.0 30.9%	16.5 10.2%	0.0 0.0%	6.2 3.8%	88.9 55.0%	0.0 0.0%	0.0 0.0%
SCIOTO RIVER												
510	V	0.27	986.	347.8	1280.	183.4 52.7%	49.3 14.2%	0.0 0.0%	104.4 30.0%	8.6 2.5%	2.1 0.6%	0.0 0.0%
LITTLE MIAMI RIVER												
511	V	0.34	257.	86.8	257.	51.7 59.6%	13.7 15.8%	0.0 0.0%	21.3 24.5%	0.0 0.0%	0.1 0.1%	0.0 0.0%
MIAMI RIVER												
513	V	0.43	720.	309.4	720.	167.0 54.0%	92.4 29.9%	0.4 0.1%	35.7 11.5%	0.0 0.0%	3.1 1.0%	10.8 3.5%
WABASH RIVER												
517	V	0.34	3412.	1150.8	3412.	507.2 44.1%	89.2 7.8%	10.1 0.9%	450.2 39.1%	94.1 8.2%	0.0 0.0%	0.0 0.0%
EAST FORK WHITE RIVER												
518	V	0.36	1098.	399.6	1098.	199.7 50.0%	75.0 18.8%	0.0 0.0%	124.9 31.3%	0.0 0.0%	0.0 0.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PUI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
WEST FORK WHITE RIVER												
519	V	0.39	937.	368.4	937.	190.4 51.7%	38.8 10.5%	0.0 0.0%	136.9 37.2%	2.3 0.6%	0.0 0.0%	0.0 0.0%
OHIO RIVER MAIN STEM & MINOR TRIBUTARIES												
521	V	0.46	2015.	1049.2	2305.	326.2 31.1%	103.2 9.8%	3.7 0.4%	211.9 20.2%	388.0 37.0%	5.4 0.5%	10.8 1.0%
MAUMEE RIVER												
601	V	0.48	523.	350.1	723.	112.0 32.0%	80.5 23.0%	0.0 0.0%	157.6 45.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
SANDUSKY RIVER												
602	V	0.24	29.	32.3	133.	9.2 28.5%	0.6 1.9%	0.0 0.0%	22.5 69.7%	0.0 0.0%	0.0 0.0%	0.0 0.0%
CUYAHOGA R												
603	V	0.58	121.	98.8	170.	85.5 86.5%	13.3 13.5%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
LAKE ERIE SHORE MAUMEE R TO SANDUSKY RIVER												
604	V	0.60	122.	72.8	122.	15.3 21.0%	0.0 0.0%	0.0 0.0%	57.5 79.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
LK ERIE SHORE-SANDUSKY R TO CUYAHOGA R												
605	V	0.35	330.	149.6	429.	85.2 57.0%	15.0 10.0%	0.0 0.0%	44.9 30.0%	0.0 0.0%	0.0 0.0%	4.5 3.0%
LK ERIE SHORE-CUYAHOGA R TO N Y ST LINE												
606	V	0.33	97.	92.3	276.	20.3 22.0%	63.7 69.0%	0.0 0.0%	8.3 9.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PUI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
RED RIVER OF THE NORTH												
701	V	0.18	73.	27.2	155.	13.4 49.3%	13.4 49.3%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.4 1.5%	0.0 0.0%
RAINY RIVER												
702	V	0.26	23.	23.3	90.	0.0 0.0%	23.3 100.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
UPPER PORTION UPPER MISSISSIPPI R												
703	V	0.19	808.	173.6	905.	34.7 20.0%	8.7 5.0%	0.0 0.0%	130.2 75.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
MINNESOTA RIVER												
704	V	0.55	357.	196.2	357.	5.9 3.0%	0.0 0.0%	0.0 0.0%	190.3 97.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
ST. CROIX												
705	V	0.08	296.	22.5	296.	0.7 3.1%	0.0 0.0%	0.0 0.0%	21.8 96.9%	0.0 0.0%	0.0 0.0%	0.0 0.0%
LOWER PORTION UPPER MISSISSIPPI RIVER												
706	V	0.23	1026.	285.7	1252.	65.7 23.0%	5.7 2.0%	0.0 0.0%	214.3 75.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
WISCONSIN RIVER												
707	V	0.37	350.	157.7	423.	7.9 5.0%	118.3 75.0%	0.0 0.0%	31.5 20.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
MISSISSIPPI-WAPSIPINICON AND TRIBUTARIES												
708	V	0.0	0.	0.0	0.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
ROCK RIVER												
709	V	0.16	67.	53.5	330.	24.1 45.0%	27.8 52.0%	0.0 0.0%	1.6 3.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
MISSISSIPPI-IOWA-CEDAR RIVERS												
710	V	1.19	49.	58.1	49.	12.0 20.7%	34.0 58.5%	0.0 0.0%	12.1 20.8%	0.0 0.0%	0.0 0.0%	0.0 0.0%
MISSISSIPPI-DES MOINES-SKUNK RIVERS												
711	V	0.0	0.	0.0	0.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
MISSISSIPPI-SALT RIVERS												
712	V	0.01	2.	0.8	142.	0.6 75.0%	0.2 25.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
CHICAGO-CALUMET RS.-DES PLAINES R												
713	V	0.53	83.	70.1	132.	65.2 93.0%	4.9 7.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
KANKAKEE RIVER												
715	V	0.01	2.	1.3	144.	0.5 38.5%	0.8 61.5%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
FOX RIVER												
716	V	0.33	70.	62.8	190.	51.5 82.0%	11.3 18.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
ILLINOIS RIVER												
717	V	0.21	148.	135.8	636.	55.7 41.0%	67.9 50.0%	0.0 0.0%	2.7 2.0%	0.0 0.0%	9.5 7.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
MISSISSIPPI-ST. LOUIS AREA												
718	V	0.43	14.	9.1	21.	4.1 45.1%	5.0 54.9%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
KASKASKIA RIVER												
720	V	0.0	0.	0.0	465.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
BIG MUDDY RIVER												
721	V	0.21	197.	81.6	397.	21.2 26.0%	0.0 0.0%	0.0 0.0%	9.8 12.0%	50.6 62.0%	0.0 0.0%	0.0 0.0%
MISSISSIPPI RIVER-CAPE GIRARDEAU AREA												
722	V	0.23	80.	18.3	80.	9.1 49.7%	9.2 50.3%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
LAKE SUPERIOR												
823	V	0.08	467.	135.4	1689.	31.6 23.3%	40.5 29.9%	0.0 0.0%	58.7 43.4%	4.6 3.4%	0.0 0.0%	0.0 0.0%
GREEN BAY WESTERN SHORE												
824	V	0.06	88.	51.3	838.	25.2 49.1%	21.0 40.9%	0.0 0.0%	0.5 1.0%	4.6 9.0%	0.0 0.0%	0.0 0.0%
FOX RIVER-WOLF CREEK												
825	V	0.12	54.	51.0	412.	16.3 32.0%	34.7 68.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
LAKE MICHIGAN WESTERN SHORE												
826	V	0.19	372.	175.2	909.	91.6 52.3%	83.6 47.7%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
LAKE MICHIGAN-NORTH SHORE												
827	V	0.06	158.	31.0	517.	0.3 1.0%	30.7 99.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
LAKE MICHIGAN NORTHEASTERN SHORE												
828	V	0.01	202.	13.1	902.	8.4 64.1%	4.7 35.9%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
MUSKEGON RIVER												
829	V	0.02	12.	4.4	262.	2.6 59.1%	1.8 40.9%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
GRAND RIVER												
830	V	0.10	88.	48.8	480.	44.4 91.0%	3.9 8.0%	0.0 0.0%	0.5 1.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
KALAMAZOO RIVER												
831	V	0.16	53.	42.8	272.	13.3 31.1%	29.5 68.9%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
ST. JOSEPH RIVER												
832	V	0.19	62.	51.1	269.	33.2 65.0%	17.9 35.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
LAKE HURON WESTERN SHORE												
833	V	0.13	294.	127.1	953.	58.4 45.9%	34.3 27.0%	11.4 9.0%	15.3 12.0%	1.3 1.0%	1.3 1.0%	5.1 4.0%
SAGINAW RIVER												
834	V	0.25	19..	65.7	261.	46.6 70.9%	17.1 26.0%	0.0 0.0%	2.0 3.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
LAKE ST. CLAIR&ST. CLAIR RIVER												
835	V	0.32	156.	79.1	251.	39.5 49.9%	31.6 39.9%	2.4 3.0%	2.4 3.0%	0.0 0.0%	1.6 2.0%	1.6 2.0%
LAKE ERIE WESTERN SHORE-DETROIT RIVER												
836	V	0.49	313.	224.2	453.	143.6 64.0%	60.5 27.0%	0.0 0.0%	15.7 7.0%	0.0 0.0%	2.2 1.0%	2.2 1.0%
LAKE HURON-NORTH SHORE												
837	V	0.04	7.	2.9	80.	1.3 44.8%	0.8 27.6%	0.3 10.3%	0.4 13.8%	0.0 0.0%	0.0 0.0%	0.1 3.4%
CALUMET-BURNS DITCH COMPLEX												
849	V	0.39	37.	30.1	78.	6.3 20.9%	23.8 79.1%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
BIG SIOUX RIVER												
907	V	0.0	0.	0.0	0.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
LOWER MISSOURI R FROM NIOBRARA R												
912	V	0.0	0.	0.0	0.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
SUMMARY FOR												
REGION	5	0.28	18569.	7926.3	28769.	3257.1 41.1%	1616.1 20.4%	31.5 0.4%	2139.4 27.0%	816.9 10.3%	30.3 0.4%	35.1 0.4%

S U M M A R Y

NATIONAL WATER POLLUTION ASSESSMENT

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SUB-BASIN	REG	INDEX	P	POI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
PEARL RIVER												
343	VI	0.80	25.	20.0	25.	5.6 28.0%	10.2 51.0%	0.0 0.0%	2.4 12.0%	0.6 3.0%	0.6 3.0%	0.6 3.0%
ARK R-KAN-COLO ST LINE TO TULSA												
1002	VI	0.02	65.	17.8	1000.	6.2 34.8%	9.6 53.9%	0.0 0.0%	0.5 2.8%	1.3 7.3%	0.2 1.1%	0.0 0.0%
VERDIGRIS RIVER												
1003	VI	0.17	140.	80.5	460.	25.0 31.1%	29.8 37.0%	1.6 2.0%	0.8 1.0%	20.9 26.0%	1.6 2.0%	0.8 1.0%
GRAND NEOSHO RIVER												
1004	VI	0.0	0.	0.0	320.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
WHITE RIVER												
1005	VI	0.01	50.	6.0	1080.	2.9 48.3%	2.7 45.0%	0.0 0.0%	0.3 5.0%	0.0 0.0%	0.1 1.7%	0.0 0.0%
L MISS R--CAIRO TO HELENA ARK												
1006	VI	0.01	50.	3.9	640.	1.6 41.0%	0.4 10.3%	0.0 0.0%	1.7 43.6%	0.1 2.6%	0.1 2.6%	0.0 0.0%
CIMARRON RIVER-NEW MEX-COLO-KANSAS & OKLA												
1007	VI	0.20	230.	186.0	915.	146.9 79.0%	39.1 21.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
NORTH CANADIAN RIVER												
1008	VI	0.17	895.	345.5	2055.	89.8 26.0%	69.1 20.0%	6.9 2.0%	127.8 37.0%	0.0 0.0%	48.4 14.0%	3.5 1.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
ARKANSAS R--TULSA TO VAN BUREN												
1009	VI	0.05	115.	58.4	1125.	18.1 31.0%	16.3 27.9%	0.0 0.0%	2.3 3.9%	7.6 13.0%	8.8 15.1%	5.3 9.1%
ARKANSAS RIVER--VAN BUREN TO MOUTH												
1010	VI	0.03	200.	62.0	2320.	29.8 48.1%	18.0 29.0%	1.2 1.9%	4.3 6.9%	1.9 3.1%	4.3 6.9%	2.5 4.0%
LOWER MISSISSIPPI RIVER-YAZOO RIVER												
1011	VI	0.0	0.	0.0	112.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
SO CANADIAN R-ABOVE TEX-OKLA ST LINE												
1012	VI	0.07	420.	96.4	1400.	29.9 31.0%	7.7 8.0%	1.0 1.0%	51.1 53.0%	6.7 7.0%	0.0 0.0%	0.0 0.0%
SO CANADIAN R--BELOW TEX-OKLA ST LINE												
1013	VI	0.16	280.	128.0	785.	80.6 63.0%	24.3 19.0%	2.6 2.0%	9.0 7.0%	9.0 7.0%	2.5 2.0%	0.0 0.0%
WASHITA RIVER												
1014	VI	0.05	280.	56.0	1045.	20.7 37.0%	3.4 6.1%	0.0 0.0%	20.1 35.9%	11.8 21.1%	0.0 0.0%	0.0 0.0%
UPPER RED RIVER--ABOVE DENISON												
1015	VI	0.05	565.	174.0	3415.	113.1 65.0%	10.4 6.0%	5.2 3.0%	31.3 18.0%	10.5 6.0%	3.5 2.0%	0.0 0.0%
LOWER RED RIVER--BELOW DENISON												
1016	VI	0.03	747.	120.4	4475.	51.8 43.0%	36.1 30.0%	1.2 1.0%	10.8 9.0%	15.7 13.0%	4.8 4.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
OUACHITA RIVER												
1017	VI	0.03	1048.	122.3	4210.	55.1 45.1%	31.8 26.0%	0.0 0.0%	3.7 3.0%	26.9 22.0%	2.4 2.0%	2.4 2.0%
LOWER MISSISSIPPI RIVER--BIG BLACK RIVER												
1018	VI	0.0	0.	0.0	36.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
ATCHAFALAYA RIVER												
1019	VI	0.06	390.	135.6	2285.	51.5 38.0%	57.0 42.0%	0.0 0.0%	9.5 7.0%	10.8 8.0%	4.1 3.0%	2.7 2.0%
CALCASIEU RIVER												
1020	VI	0.17	345.	188.1	1125.	45.1 24.0%	112.9 60.0%	1.9 1.0%	5.6 3.0%	15.1 8.0%	1.9 1.0%	5.6 3.0%
LOWER MISSISSIPPI RIVER-NATCHEZ TO GULF												
1021	VI	0.09	231.	117.5	1380.	55.7 47.4%	35.7 30.4%	1.1 0.9%	12.1 10.3%	4.7 4.0%	3.5 3.0%	4.7 4.0%
MIDDLE COLORADO-SAN JUAN RIVERS												
1102	VI	0.21	133.	45.2	215.	5.6 12.4%	5.7 12.6%	0.0 0.0%	10.1 22.3%	23.8 52.7%	0.0 0.0%	0.0 0.0%
GILA RIVER												
1104	VI	0.0	0.	0.0	75.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
LITTLE COLORADO RIVER												
1105	VI	0.0	0.	0.0	50.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
SABINE RIVER												
1201	VI	0.03	220.	30.1	1100.	8.7 28.9%	17.5 58.1%	0.0 0.0%	3.6 12.0%	0.3 1.0%	0.0 0.0%	0.0 0.0%
NECHES RIVER												
1202	VI	0.07	165.	92.7	1380.	30.6 33.0%	51.0 55.0%	0.9 1.0%	4.6 5.0%	1.9 2.0%	0.9 1.0%	2.8 3.0%
TRINITY & SAN JACINTO RIVERS												
1203	VI	0.39	1245.	1044.3	2650.	501.3 48.0%	438.6 42.0%	20.9 2.0%	20.9 2.0%	31.3 3.0%	10.4 1.0%	20.9 2.0%
BRAZOS RIVER												
1204	VI	0.07	375.	164.0	2290.	124.6 76.0%	21.3 13.0%	3.3 2.0%	6.6 4.0%	6.6 4.0%	1.6 1.0%	0.0 0.0%
COLORADO RIVER												
1205	VI	0.05	368.	137.7	2948.	92.3 67.0%	12.4 9.0%	2.7 2.0%	22.0 16.0%	8.3 6.0%	0.0 0.0%	0.0 0.0%
GUADELUPE LAVACA AND SAN ANTONIO BASIN												
1206	VI	0.05	345.	63.2	1300.	39.8 63.0%	12.7 20.1%	1.9 3.0%	2.5 4.0%	2.5 4.0%	2.5 4.0%	1.3 2.1%
NUECES RIVER												
1207	VI	0.03	148.	24.3	720.	13.9 57.2%	7.3 30.0%	0.0 0.0%	1.4 5.8%	1.0 4.1%	0.2 0.8%	0.5 2.1%
UPPER PECOS RIVER												
1208	VI	0.02	120.	13.5	615.	3.4 25.2%	2.8 20.7%	0.0 0.0%	7.0 51.9%	0.0 0.0%	0.3 2.2%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
RIO GRANDE UPPER ABOVE PECOS RIVER												
1209	VI	0.04	630.	104.4	2575.	30.3 29.0%	3.1 3.0%	0.0 0.0%	70.0 67.0%	0.0 0.0%	1.0 1.0%	0.0 0.0%
RIO GRANDE LOWER BELOW PECOS RIVER												
1210	VI	0.06	185.	32.4	520.	10.7 33.0%	4.5 13.9%	0.4 1.2%	14.9 46.0%	1.3 4.0%	0.3 0.9%	0.3 0.9%
SUMMARY FOR												
REGION	6	0.08	10010.	3670.2	46646.	1690.6 46.1%	1091.4 29.7%	52.8 1.4%	456.9 12.4%	220.6 6.0%	104.0 2.8%	53.9 1.5%

SUMMARY

NATIONAL WATER POLLUTION ASSESSMENT

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SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
MINNESOTA RIVER												
704	VII	0.0	0.	0.0	0.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
LOWER PORTION UPPER MISSISSIPPI RIVER												
706	VII	0.18	112.	20.7	112.	0.6 2.9%	0.0 0.0%	0.0 0.0%	20.1 97.1%	0.0 0.0%	0.0 0.0%	0.0 0.0%
MISSISSIPPI-WAPSIPINICON AND TRIBUTARIES												
708	VII	0.03	8.	18.8	616.	11.8 62.8%	7.0 37.2%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
MISSISSIPPI-IOWA-CEDAR RIVERS												
710	VII	0.13	152.	99.2	744.	34.7 35.0%	15.9 16.0%	0.0 0.0%	48.6 49.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
MISSISSIPPI-DES MOINES-SKUNK RIVERS												
711	VII	0.04	78.	32.3	810.	21.0 65.0%	11.3 35.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
MISSISSIPPI-SALT RIVERS												
712	VII	0.0	3.	0.9	540.	0.6 66.7%	0.3 33.3%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
MISSISSIPPI-ST. LOUIS AREA												
718	VII	0.42	14.	9.2	22.	4.1 44.6%	5.1 55.4%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
MERAMEC RIVER												
719	VII	0.02	13.	9.8	496.	9.0 91.8%	0.0 0.0%	0.8 8.2%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
MISSISSIPPI RIVER-CAPE GIRARDEAU AREA												
722	VII	0.23	80.	18.3	80.	9.2 50.3%	9.1 49.7%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
S C MO R SPRING CREEK TO NIOBRARA R												
904	VII	0.0	0.	0.0	215.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
NIOBRARA RIVER												
905	VII	0.0	0.	0.0	431.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
BIG SIOUX RIVER												
907	VII	0.05	20.	6.4	134.	5.8 90.6%	0.6 9.4%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
L PLATTE R FROM N PLATTE												
908	VII	0.01	10.	1.9	310.	1.9 100.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
NORTH PLATTE RIVER												
909	VII	0.03	114.	6.8	199.	0.0 0.0%	6.8 100.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
SOUTH PLATTE RIVER												
910	VII	0.0	0.	0.0	84.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
KANSAS RIVER												
911	VII	0.02	50.	15.7	805.	7.7 49.0%	4.7 29.9%	3.0 19.1%	0.0 0.0%	0.0 0.0%	0.3 1.9%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
LOWER MISSOURI R FROM NIOBRARA R												
912	VII	0.27	812.	326.7	1221.	283.6 86.8%	43.1 13.2%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
GRAND-CHARITON RIVERS												
913	VII	0.02	15.	6.2	280.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	6.2 100.0%	0.0 0.0%	0.0 0.0%
OSAGE-GASCONADE RIVERS												
914	VII	0.01	50.	2.0	360.	1.9 95.0%	0.0 0.0%	0.1 5.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
ARK R-KAN-COLO ST LINE TO TULSA												
1002	VII	0.02	302.	57.1	2770.	27.4 48.0%	10.3 18.0%	0.0 0.0%	14.9 26.1%	3.4 6.0%	1.1 1.9%	0.0 0.0%
VERDIGRIS RIVER												
1003	VII	0.03	50.	16.9	600.	8.4 49.7%	6.4 37.9%	0.0 0.0%	1.9 11.2%	0.2 1.2%	0.0 0.0%	0.0 0.0%
GRAND NEOSHO RIVER												
1004	VII	0.06	343.	113.0	1845.	41.9 37.1%	12.6 11.2%	0.0 0.0%	48.9 43.3%	6.5 5.8%	3.1 2.7%	0.0 0.0%
WHITE RIVER												
1005	VII	0.0	60.	7.2	5045.	3.8 52.8%	1.6 22.2%	0.1 1.4%	1.1 15.3%	0.4 5.6%	0.2 2.8%	0.0 0.0%
L MISS R--CAIRO TO HELENA ARK												
1006	VII	0.0	30.	2.4	680.	0.0 0.0%	0.0 0.0%	0.0 0.0%	2.4 100.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
CIMARRON RIVER-NEW MEX-COLO-KANSAS & OKLA												
1007	VII	0.02	80.	16.0	790.	5.0 31.3%	0.0 0.0%	0.0 0.0%	11.0 68.8%	0.0 0.0%	0.0 0.0%	0.0 0.0%
SUMMARY FOR												
REGION	7	0.04	2396.	787.5	19189.	478.4 60.7%	134.8 17.1%	4.0 0.5%	148.9 18.9%	16.7 2.1%	4.7 0.6%	0.0 0.0%

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SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
RED RIVER OF THE NORTH												
701	VIII	0.18	73.	27.2	155.	13.4 49.3%	13.4 49.3%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.4 1.5%	0.0 0.0%
MINNESOTA RIVER												
704	VIII	0.0	0.	0.0	0.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
SOURIS RIVER & DEVILS LAKE AREA												
723	VIII	0.02	31.	10.9	450.	8.2 75.2%	2.7 24.8%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
UPPER MISSOURI R-HEADWATERS TO MILK R												
901	VIII	0.01	64.	10.7	1167.	10.7 100.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
YELLOWSTONE RIVER												
902	VIII	0.04	121.	28.7	671.	22.0 76.7%	6.7 23.3%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
N CENTRAL MO-FROM MILK R TO SPRG CR												
903	VIII	0.0	0.	0.0	528.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
S C MO R SPRING CREEK TO NIOBRARA R												
904	VIII	0.01	168.	15.8	1538.	1.9 12.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	13.9 88.0%	0.0 0.0%	0.0 0.0%
NIOBRARA RIVER												
905	VIII	0.0	0.	0.0	0.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
JAMES RIVER												
906	VIII	0.06	164.	45.9	710.	45.9 100.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
BIG SIOUX RIVER												
907	VIII	0.03	20.	6.4	213.	5.8 90.6%	0.6 9.4%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
NORTH PLATTE RIVER												
909	VIII	0.0	31.	1.8	391.	1.2 66.7%	0.6 33.3%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
SOUTH PLATTE RIVER												
910	VIII	0.0	0.	0.0	341.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
KANSAS RIVER												
911	VIII	0.0	0.	0.0	0.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
LOWER MISSOURI R FROM NIOBRARA R												
912	VIII	0.0	0.	0.0	0.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
UP ARKANSAS R ABOVE KAN-COLO ST. LINE												
1001	VIII	0.03	463.	75.4	2510.	13.6 18.0%	3.8 5.0%	0.7 0.9%	6.8 9.0%	50.5 67.0%	0.0 0.0%	0.0 0.0%
ARK R-KAN-COLO ST LINE TO TULSA												
1002	VIII	0.0	0.	0.0	0.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
CIMARRON RIVER-NEW MEX-COLO-KANSAS & OKLA												
1007	VIII	0.0	0.	0.0	0.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
LOWER COLORADO RIVER												
1101	VIII	0.0	0.	0.0	100.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
MIDDLE COLORADO-SAN JUAN RIVERS												
1102	VIII	0.18	2368.	483.8	2715.	85.4 17.7%	83.7 17.3%	0.0 0.0%	273.4 56.5%	41.3 8.5%	0.0 0.0%	0.0 0.0%
UPPER COLORADO RIVER												
1103	VIII	0.03	401.	51.8	1756.	0.0 0.0%	0.0 0.0%	0.0 0.0%	51.8 100.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
GREEN RIVER												
1106	VIII	0.07	743.	161.3	2330.	0.0 0.0%	0.0 0.0%	0.0 0.0%	161.3 100.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
RIO GRANDE UPPER ABOVE PECOS RIVER												
1209	VIII	0.0	0.	0.0	640.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
KOOTENAI RIVER												
1301	VIII	0.0	0.	0.0	484.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
CLARK FORK-PEND OREILLE RIVER												
1302	VIII	0.04	226.	77.5	1923.	10.1 13.0%	49.6 64.0%	2.3 3.0%	11.6 15.0%	3.9 5.0%	0.0 0.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
UPPER SNAKE RIVER												
1306	VIII	0.0	0.	0.0	166.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
CENTRAL NEVADA												
1503	VIII	0.0	0.	0.0	0.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
GREAT SALT LAKE												
1507	VIII	0.07	239.	180.9	2615.	102.0 56.4%	64.0 35.4%	0.0 0.0%	14.9 8.2%	0.0 0.0%	0.0 0.0%	0.0 0.0%
SEVIER RIVER												
1508	VIII	0.14	571.	174.9	1290.	22.7 13.0%	46.2 26.4%	0.0 0.0%	106.0 60.6%	0.0 0.0%	0.0 0.0%	0.0 0.0%
SUMMARY FOR												
REGION	8	0.06	5683.	1353.0	22693.	342.9 25.3%	271.3 20.1%	3.0 0.2%	625.8 46.3%	109.6 8.1%	0.4 0.0%	0.0 0.0%

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SUB-BASIN NO.	INDEX	P	POI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
LOWER COLORADO RIVER											
1101	IA	0.31	1161.	496.0	1590.	0.0 0.0%	0.0 0.0%	0.0 0.0%	496.0 100.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
MIDDLE COLORADO-SAN JUAN RIVERS											
1102	IA	0.10	52.	5.2	52.	1.0 19.2%	1.0 19.2%	0.0 0.0%	3.2 61.5%	0.0 0.0%	0.0 0.0%	0.0 0.0%
GILA RIVER											
1104	IA	0.08	500.	54.4	710.	0.0 0.0%	0.0 0.0%	0.0 0.0%	54.4 100.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
LITTLE COLORADO RIVER											
1105	IA	0.02	85.	11.0	450.	0.0 0.0%	0.0 0.0%	0.0 0.0%	11.0 100.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
UPPER SNAKE RIVER											
1206	IA	0.0	0.	0.0	0.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
CENTRAL SNAKE RIVER											
1207	IA	0.0	0.	0.0	104.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
KLAMATH RIVER											
1401	IA	0.02	100.	50.0	2035.	10.0 20.0%	25.0 50.0%	0.0 0.0%	5.0 10.0%	0.0 0.0%	10.0 20.0%	0.0 0.0%
NORTH COASTAL											
1402	IA	0.04	449.	129.7	3456.	33.0 25.4%	60.0 46.3%	0.0 0.0%	12.4 9.6%	0.0 0.0%	24.3 18.7%	0.0 0.0%

SUBBASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
SAN FRANCISCO BAY REGION												
1403	IA	0.23	315.	118.2	516.	97.8 82.7%	14.0 11.8%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	6.4 5.4%
CENTRAL COASTAL												
1404	IA	0.01	80.	19.0	1441.	7.6 40.0%	7.6 40.0%	0.0 0.0%	1.9 10.0%	0.0 0.0%	1.9 10.0%	0.0 0.0%
SANTA CLARA RIVER												
1405	IA	0.02	6.	2.4	124.	0.0 0.0%	2.4 100.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
LOS ANGELES RIVER												
1406	IA	0.08	89.	10.0	128.	8.2 82.0%	0.7 7.0%	0.1 1.0%	0.9 9.0%	0.0 0.0%	0.0 0.0%	0.1 1.0%
SANTA ANA RIVER												
1407	IA	0.01	18.	1.7	121.	1.3 76.5%	0.0 0.0%	0.0 0.0%	0.4 23.5%	0.0 0.0%	0.0 0.0%	0.0 0.0%
SAN DIEGO COASTAL REGION												
1408	IA	0.02	19.	2.5	157.	2.5 100.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
SACRAMENTO RIVER												
1409	IA	0.02	225.	46.7	2502.	13.5 28.9%	5.2 11.1%	0.0 0.0%	11.0 23.6%	7.0 15.0%	10.0 21.4%	0.0 0.0%
SAN JOAQUIN RIVER												
1410	IA	0.03	156.	36.1	1095.	7.7 21.3%	0.0 0.0%	0.0 0.0%	21.4 59.3%	5.0 13.9%	0.0 0.0%	2.0 5.5%

Sub-basin	HEV	Index	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
KINGS AND KERN RIVERS AND TULARE LAKE												
1011	IA	0.0	0.	0.0	435.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
NORTHWESTERN LAHONTAN												
1001	IA	0.07	184.	33.0	490.	6.0 18.2%	0.5 1.5%	0.0 0.0%	26.5 80.3%	0.0 0.0%	0.0 0.0%	0.0 0.0%
HUMBOLDT RIVER												
1002	IA	0.04	159.	30.8	760.	4.7 15.3%	0.0 0.0%	0.0 0.0%	18.7 60.7%	7.4 24.0%	0.0 0.0%	0.0 0.0%
CENTRAL NEVADA												
1003	IA	0.09	182.	17.0	340.	0.0 0.0%	0.0 0.0%	0.0 0.0%	17.0 100.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
OWENS RIVER												
1004	IA	0.0	0.	0.0	98.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
MOJAVE RIVER												
1005	IA	0.0	0.	0.0	1.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
COLORADO RIVER BASIN REGION OF CALIFORNIA												
1006	IA	0.43	160.	98.8	230.	15.8 16.0%	0.0 0.0%	0.0 0.0%	83.0 84.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
GREAT SALT LAKE												
1007	IA	0.0	0.	0.0	0.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
SUMMARY FOR												
REGION	9	0.07	3956.	1162.5	16835.	209.1 18.0%	116.4 10.0%	0.1 0.0%	762.8 65.6%	19.4 1.7%	46.2 4.0%	8.5 0.7%

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SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
KOOTENAI RIVER												
1301	A	0.05	70.	10.5	197.	1.7 16.2%	0.0 0.0%	0.0 0.0%	1.0 9.5%	5.5 52.4%	2.3 21.9%	0.0 0.0%
CLARK FORK-PEND OREILLE RIVER												
1302	A	0.05	33.	12.1	248.	1.6 13.2%	7.7 63.6%	0.4 3.3%	1.8 14.9%	0.6 5.0%	0.0 0.0%	0.0 0.0%
SPOKANE RIVER												
1303	A	0.09	212.	77.3	840.	21.6 27.9%	43.3 56.0%	0.0 0.0%	4.7 6.1%	2.3 3.0%	5.4 7.0%	0.0 0.0%
YAKIMA RIVER												
1304	A	0.02	262.	25.4	1080.	6.8 26.8%	6.4 25.2%	0.5 2.0%	7.1 28.0%	0.0 0.0%	4.6 18.1%	0.0 0.0%
COLUMBIA RIVER ABOVE YAKIMA RIVER												
1305	A	0.01	302.	16.7	1936.	1.7 10.2%	5.4 32.3%	0.3 1.8%	2.5 15.0%	1.8 10.8%	5.0 29.9%	0.0 0.0%
UPPER SNAKE RIVER												
1306	A	0.02	448.	38.0	1611.	8.3 21.8%	13.7 36.1%	0.0 0.0%	10.3 27.1%	0.0 0.0%	5.7 15.0%	0.0 0.0%
CENTRAL SNAKE RIVER												
1307	A	0.02	623.	38.7	1822.	6.2 16.0%	8.1 20.9%	0.0 0.0%	7.8 20.2%	4.6 11.9%	12.0 31.0%	0.0 0.0%
MIDDLE AND LOWER SNAKE RIVER												
1308	A	0.03	815.	76.4	2721.	5.4 7.1%	21.3 27.9%	0.8 1.0%	9.9 13.0%	9.2 12.0%	29.8 39.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
WILLAMETTE RIVER												
1309	A	0.03	479.	90.2	2738.	27.9 30.9%	32.5 36.0%	0.9 1.0%	11.8 13.1%	0.0 0.0%	17.1 19.0%	0.0 0.0%
COLUMBIA RIVER BELOW YAKIMA RIVER												
1310	A	0.02	949.	72.6	4010.	7.3 10.1%	23.9 32.9%	0.0 0.0%	13.1 18.0%	4.4 6.1%	23.9 32.9%	0.0 0.0%
PUGET SOUND												
1311	A	0.02	389.	75.0	3850.	28.5 38.0%	31.5 42.0%	1.5 2.0%	9.7 12.9%	0.0 0.0%	3.8 5.1%	0.0 0.0%
WASHINGTON COAST												
1312	A	0.01	273.	13.8	2003.	2.6 18.8%	6.6 47.8%	0.0 0.0%	3.5 25.4%	0.0 0.0%	1.1 8.0%	0.0 0.0%
OREGON COAST												
1313	A	0.01	544.	36.0	4650.	6.5 18.1%	12.2 33.9%	0.4 1.1%	6.5 18.1%	7.2 20.0%	3.2 8.9%	0.0 0.0%
SOUTHERN OREGON LAKES												
1314	A	0.0	0.	0.0	60.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
KLAMATH RIVER												
1401	A	0.05	18.	11.5	254.	2.3 20.0%	5.8 50.4%	0.0 0.0%	1.1 9.6%	0.0 0.0%	2.3 20.0%	0.0 0.0%
SACRAMENTO RIVER												
1409	A	0.0	0.	0.0	46.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%

SUB-BASIN	REG	INDEX	P	PDI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
NORTHWESTERN LAHONTAN												
1001	A	0.0	0.	0.0	25.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
GREAT SALT LAKE												
1007	A	0.0	0.	0.0	75.	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%	0.0 0.0%
SUMMARY FOR												
REGION	10	0.02	5477.	594.2	28166.	128.4 21.6%	218.4 36.8%	4.8 0.8%	90.8 15.3%	35.6 6.0%	116.2 19.6%	0.0 0.0%

GRAND TOTALS FOR ALL 10 REGIONS

INDEX	P	POI	MILES	MUN.	IND.	FED.	AGR.	MIN	WRD	TRANS
0.12	76299.	31111.6	260324.	12780.1	7747.9	174.5	5342.4	4244.8	567.1	254.8
				41.1%	24.9%	0.6%	17.2%	13.6%	1.8%	0.8%

PART IV

SURVEY OF PLANNED CONSTRUCTION OF MUNICIPAL WASTE TREATMENT FACILITIES

SURVEY PROCEDURE--DECEMBER 1971 ASSESSMENT

Building upon experience from previous assessments, a plan for conducting the new survey was devised. The plan included: (a) the identification of the data to be generated and making the data amenable to an existing Office of Water Programs automated system (to facilitate storage and retrieval); (b) the identification of the specific municipalities serving populations of 10,000 or more; and (c) the arrangements for a more direct involvement of the States and communities in the survey. It was also determined that the Regional Offices would continue to play the major role in dealing with the States and municipalities. Accordingly, instructions, lists of cities, and survey forms were prepared for the Regions which, in turn, would proceed as follows:

1. Examine and correct the listings, where necessary.
2. Notify the States of the survey plan--to determine the State's preference as to whether EPA should deal with municipalities through the States or directly.
3. Mail the survey forms and instructions to the municipalities, either directly or through the States.
4. Have the municipalities return the completed survey forms to the Regions.
5. Enter the initial data furnished by the municipalities into the computer, via the Regional computer terminal.
6. Send a copy of the computer-prepared printout containing initial data for all communities in the States to each State for review and verification at the State agency level.
7. Receive from the States fully completed survey forms showing the final data.
8. After Regional review, enter the data into the OWP central computer via the terminal.

The analysis of the data and report preparation by the Office of Water Programs, at Headquarters, was performed on the computer-stored data as it became available.

To test the concept and operating elements of the survey plan, a pilot survey was conducted in the States of Alaska, Idaho, Oregon, and Washington during May and June of 1971. Based on experience with the pilot study, the instructions and procedures were appropriately modified prior to initiation of the full scale survey.

The survey, in its formative period, was a joint effort by the Division of Municipal Waste Water Programs and the Division of Applied Technology. The former was responsible for the conduct of the survey and the gathering, analysis, and reporting of the data. The Applied Technology Division was responsible for the development of the survey form and for the input, storage, and retrieval of the data. Since it was deemed necessary to store the survey data in an existing central data bank so that the new data could be related to already available data on water pollution control

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facilities, the Office of Water Programs Inventory file was selected as the repository for the survey information. This decision required that the format and element structure of the survey conform to the inventory system (STORET) operated by the Division of Applied Technology.

With the survey being managed by Municipal Waste Water personnel and the gathered information being stored in and retrieved from an automated file operated by Applied Technology personnel, a close operating relationship had to be established between the two separate organizations in order to effectively carry out the survey operation. The development of a collaborative effort at the Regional level was brought about by the conduct of a joint survey orientation meeting which involved representatives from the two Headquarters organizations and their Regional counterparts. Through the orientation meeting, each group's separate and common responsibilities and the required sequence of events and concomitant timetable were clarified, and the stage was set for launching the survey with a sense of unity and common direction.

As a first step in carrying out the survey, the Regional Offices were requested to examine the list of municipalities identified from the OWP Inventory File to screen out entries which were recognized as: (a) currently nonexistent (in terms of providing pollution control services); (b) having had their needs fulfilled and/or; (c) otherwise in error.

Following the screening, the next step was to determine the municipal addressee who would be in the best position to provide the required information. In the smaller municipalities--many of which, in recent years, became parts of sewer authorities--this was a difficult but necessary task. Concurrently, the States were advised of the details and offered the opportunity to contact the municipalities themselves if they felt it was in their interests to do so. The States generally agreed to EPA going directly to the municipalities. The third step consisted of the Regions mailing to each municipality three copies of the survey form, along with instructions and a letter advising them of the purpose and need for the data.

In accordance with the survey plan, if a response was not received in two weeks, a follow-up was initiated by the EPA Regional Office. This prompting with telegrams, telephone calls, special delivery letters, etc., continued weekly until the municipalities responded. In many instances, the survey form had to be revised and forwarded again, as the community's serving organization had recently changed. In some cases, where municipal responses could not be obtained by mail, the form was completed jointly with Regional Office staff through a face-to-face visit or telephone conversation with the proper municipal officials. Most of the visits were made to those municipalities whose needs would greatly impact the survey. For example, the large-scaled and diverse needs of Chicago were discussed in a joint session to provide additonal assurance that a full and accurate response would be obtained.

Responses, as they were received in the Regions, were examined for

completeness and adherence to instructions. As necessary, follow-up calls were made to get additional information or otherwise clarify municipal entries. The complete and corrected forms were then turned over to Regional Technical Data and Information staffs for coding, key-punching, storing, and retrieving using Regional computer terminals. Printouts of the entered survey data, produced from the terminals, were then returned to the Regional Waste Water Program staff where they were checked against the original. As required, corrections were made and, when ready, a clean computer-prepared printout of the survey form as submitted by the municipality, was mailed to the State for its review and entering of the State's dates of expected project construction and operation.

The State-reviewed form was then returned to the Regions where the data were again examined and compared with need data recently received from the States as part of their annual program plan (one and five year lists). Discrepancies were reconciled and the data were entered into the terminal. Copies of the completed survey form were sent to the State and municipality for their information.

Data from the survey and the State's needs lists were then used to update the Pending Needs file.

A flow chart of the survey operation, Figure A-1, along with a copy of the survey form and instructions are included in Appendix A of this report.

Headquarters Operation

When the survey was initiated, it was recognized that--given the usual obstacles to be faced in assessing the needs of 2300 municipalities by mail, the ten-week period to complete the cycle, and the fact that those responsible for the conduct of the survey had other full-time duties to perform--the ideal goal of 100 percent completion would be difficult to realize. Yet, despite the difficulties, a high rate of return was achieved: of the approximately 2300 municipalities surveyed, returns were received from over 95 percent. A general appraisal made of those municipalities from which returns were not received indicated that, since most of them had populations at or just over 10,000, the probability was high that their needs, if any, would be relatively small. A summary of the responses is presented in Table 2.

Survey data stored in the central computer via the Regional terminals were extracted by the Division of Municipal Waste Water Programs for analysis and reporting. Initially, a series of test summaries were made against various elements of the data in the survey file to determine their completeness and reasonableness. Omissions and otherwise questionable data were searched for and brought to the attention of Regional personnel to ascertain the reasons for the missing and/or otherwise questionable entries. Necessary corrections to the central computer file followed.

FLOW CHART-ASSESSMENT OF THE NEED FOR SEWAGE TREATMENT FACILITIES, FY-1972-76

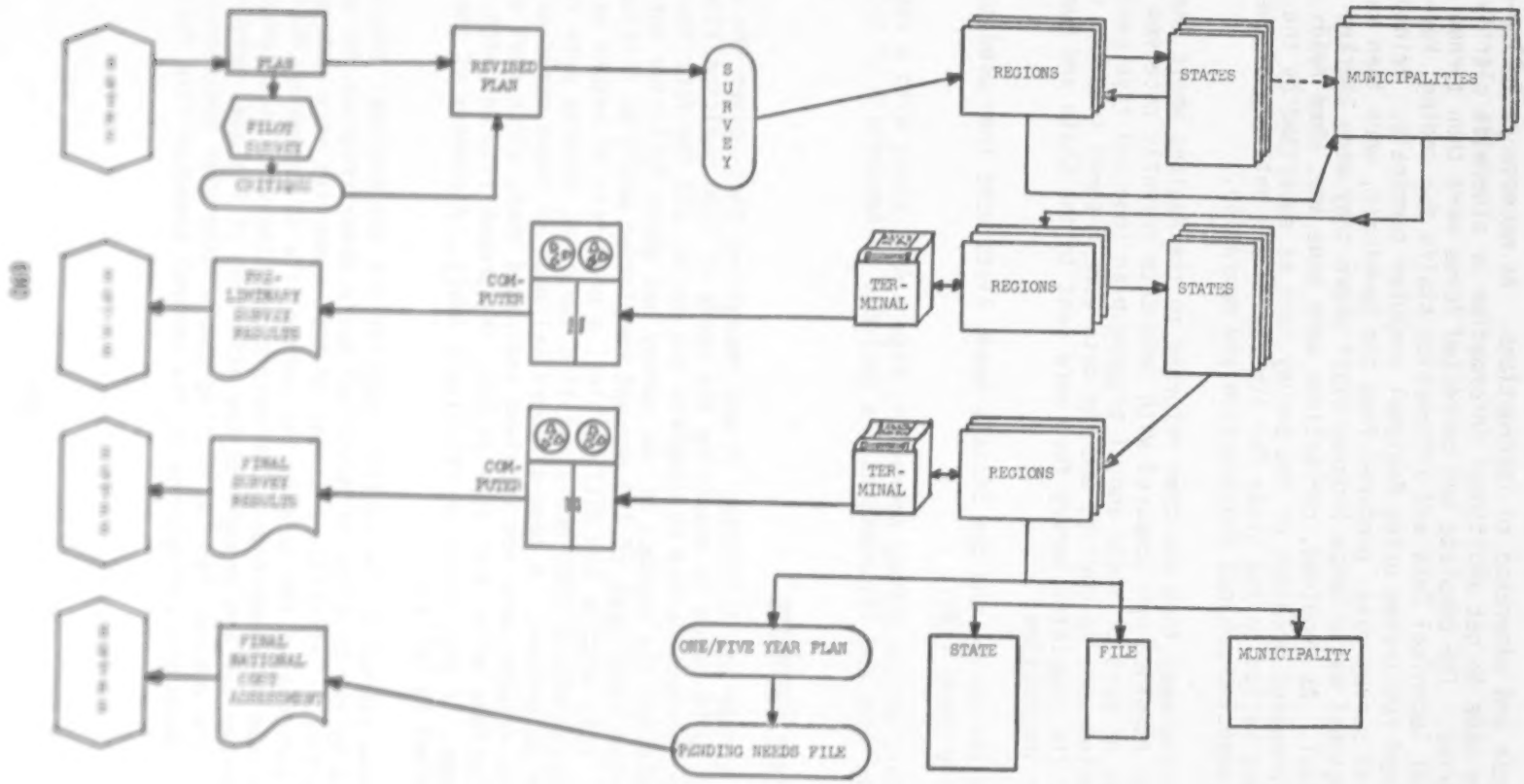

FIGURE A-1

December 1971

APPENDIX A

ENVIRONMENTAL PROTECTION AGENCY
Office of Water Programs

INSTRUCTIONS FOR MUNICIPALITIES PARTICIPATING IN SURVEY TO ASSESS NATIONAL NEEDS FOR CONSTRUCTION OF SEWAGE TREATMENT FACILITIES

Please review the survey form completely and read these instructions before you start to make entries on the form. We would suggest that you rough out the information on a plain piece of paper. If you have questions regarding the completion of any aspect of this form, please contact:

The purpose of the survey is to record the most accurate information available on your community's needs for waste treatment facilities and associated costs with particular emphasis on those needs required to meet water quality standards implementation schedules and/or enforcement actions through Fiscal Year 1976.

This information is important for us to use in evaluating the scope of pollution problems and in developing appropriate plans of action to meet these problems. Projects for which EPA grants have already been awarded are not to be included in this report.

There are blanks on the form for input from both you and your State water pollution control agency. Please complete only the following:

(402)	(409)	(505)
(403)	(410)	(506)
(404)	(ID#)	(507)
(405)	(501)	(510)
(406)	(502)	(511)
(407)	(Needs)	(512)
(408)	(504)	(513)

If the municipality named in A. on the survey form is no longer responsible for municipal waste, please contact:

In other words, if a new sanitary authority has assumed responsibility for your sanitary wastes, please make the above contact so that we may survey the new sanitary authority and so correct the record on your municipality.

INSTRUCTIONS FOR COMPLETING FORM

(402) Give that portion of population of the municipality, sanitary district, etc., served by the municipality's facilities. Use the latest decennial census figures for this purpose. When the municipality's facilities serve other community(ies), this number should be the total of all population served.

(403) Give the numbers of the Federal congressional districts in which the municipality is located, e.g., 01, 05, 09, etc.

(404) Give the method upon which the use charge is based, e.g., Hydraulic Volume; Quantity of BOD; Quantity of Solids; both Solids and BOD; and, both Volume and Quality. If other means are used, specify the method. Use Keywords shown on attachment #2.

(405) Give the year the present usage rate was established.

Give the name (406), title (407), address (408) and telephone number (409) of the individual providing the information as well as the date (410) it was supplied.

Needs information is reported by discharge. A discharge is defined as: An actual or potential unique deposit directly to a surface body of water, particularly to a river, stream, estuary, lake or pond; or, to the surface which will ultimately reach a surface body of water; or, to a surface which is impounded; or, to underground; or, into another transport system (usually via an interceptor). "Another transport system" is any method of deposit transport whose physical facilities are under the control of an organization different from the discharger (owner of interceptor), such as another municipal sewer authority.

(ID#) A discharge is named by an ID#. The first two digits are the municipality's State code. The next five digits are the municipality's community code. The next four digits are the municipality's treatment facility number (the waste and collection system). The last digit is the discharge number. If a facility has two or more discharges, an ID# for each discharge should be repeated for each discharge with only the 12th digit changing. Please check the listing of discharges for your municipality for correctness. Change the last five digits of the ID# if the listing of discharges is incorrect. Where only one discharge for a facility exists, a zero is assigned in the 12th digit for the discharge. If two or more discharges exist for the same facility, use 1, 2, 3, and so on for the 1st, 2nd, 3rd, and so on discharges.

Example: 41 67840 0001 0 Portland, Columbia Blvd. Treatment Plant
41 67840 0002 0 Portland, Tryon Creek Treatment Plant

Example: 41 67840 0001 1 Portland, Col. Blvd. Treatment Plant Discharge #1
41 67840 0001 2 Portland, Col. Blvd. Treatment Plant Discharge #2

(501) & (502) Give the discharge name, e.g., Portland, Columbia Blvd. Treatment Plant; Portland, Johnson Creek Interceptor; etc. Include the facility name in the discharge name.

(Needs) Describe, using the Keyword List appended as Attachment #1, the needs for the discharge. (Do not include projects currently receiving EPA financial assistance.) A need is defined as a project for which monies have been or will be requested to accomplish: the construction of a new facility; the modification of an existing facility; an increase in the capacity or treatment levels; or an increase in capacity and treatment levels. To identify such a need, two words from the attached list must be used.

The first three characters of the need identifier represent action; e.g., "NEW" meaning "New Facility." The second three characters of the need identifier describe the needed action; e.g., "TER" meaning "Tertiary Treatment." "NEWTER" would then be translated to mean a "New Facility with a capability of Tertiary Treatment." An "INTSEC" means that the Treatment Level will be increased to the Secondary Level. In each case the acronym must begin with the three letter word which identifies the facility action and be followed by the action description. While the need categories of Primary, Intermediate, Secondary, and Tertiary may incorporate some of the other needs, please identify separately each need defined on the Keyword List.

It is possible that there can be two or more identical needs for the same discharge. When recording this situation, the need entries must be distinguished by the addition of a digit in the 7th character position of the need word.

Continuing the previous example:

4167840 0001 1 Portland, Columbia Blvd. T. P.	INTSEC
	NEWSIN 1
	NEWSIN 2
4167840 0002 1 Portland, Tryon Creek T. P.	INCSEC

The second and third entries indicate two separate interceptor projects, the wastes from which will be treated at the Columbia Blvd. Treatment Plant. Since the needs are to be satisfied by two separately timed and funded projects, they are identified separately by the addition of the digits 1 and 2 following the need acronym.

(504) Give the cost in current year dollars of that portion of the project eligible for EPA assistance (i.e., include items such as engineering and administration, but do not include ineligible costs such as collection system.)

(505) Give the percentage, based on flow quantity, of the effluent from this discharge which can be attributed to industrial wastes.

(506) Give the date, by year and month (71/11), that the municipality plans start of construction.

(507) Give the date, by year and month (73/01), that the municipality plans to begin operations with the project (need satisfied).

(510) Give the reason for the requirement; e.g., to meet WQS; Court order; Federal Enforcement Conference; State Enforcement Conference, etc. (See Attachment #2.)

(511)(512)(513) Give additional employee requirements which are directly attributable to the construction, improvement, etc. Show these in the categories of Professional, Operation and Maintenance, and others. Although the types of personnel are named, show total numbers only in each numbered column; e.g.:

(511)
Professional includes:
(Superintendent)
(Asst. Superintendent)
(Operations Supervisor)
(Chemist)
(Biologist)
(Engineer)
(Sanitary Engineer)

Show as: (511)
3

(512)
Operations/Maintenance includes:
(Shift Foreman)
(Operator)
(Maintenance Supervisor)
(Mechanical Maintenance Foreman)
(Mechanic)
(Maintenance Helper)
(Electrician)
(Painter)
(Laborer)

Show as: (512)
7

(513)
Other includes:
(Other Para-Professionals, e.g., Laboratory Technician)
(Storekeeper)
(Clerk Typist)
(Automatic Equipment Operator)
(Laborer)
(Clerical)
(Other)

Show as: (513)
0

FACILITY ACTION

	KEY WORD
New Facility	NEW
Modification (no increase in capacity or treatment)	MOD
Increase in Capacity	INC
Increase in Treatment Level	INT
Both increase in Treatment Level and Capacity	ICT

FACILITY DESCRIPTION

	KEY WORD
Primary	PRI
Intermediate <85% BOD Removal	INT
Secondary ≥85% BOD Removal	SEC
Tertiary	TER
Phosphate Removal	PHO
Nitrate Removal	NIT
Disinfection	DIS
Sludge Processing	SLP
Sludge Disposal	SLD
Outfall	OUT
Deep Ocean Outfall	DOO
Sanitary Intercepter Sewer	SIN
Combined Intercepter Sewer	CIN
Pumping Station	IPU
Force Main	IMN
Combined Sewer Overflow Control at Sewer	OCS
Combined Sewer Overflow Control at Plant	OCP

REASONS FOR REQUIREMENT

(in hierarchial order-lowest to highest)

LOC - Locally Developed Plan

SQS - State Approved Implementation Schedule

WQS - Federal Approved Water Quality Standards Implementation Plan

CQS - FY '71 More Stringent Federally Approved WQS

ENF - Federal Enforcement Procedures or Actions

CRT - State Court Order

FED - Federal Court Order

CHARGE CODES

QUAHYD - Hydraulic Volume

QUABOD - Quantity of BOD

QUASOL - Quantity of Solids

BODSOL - Both BOD & Solids

QULVOL - Both Volume & Quality

OTHERS - Other

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